

# TRIAD 5.0

## User's Guide

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# Table of Contents

---

1: Introduction .....	7
Introducing TRIAD .....	7
Scoring .....	7
Strategies .....	8
Software .....	8
Documentation .....	9
Working with TRIAD .....	9
Strategic Portfolios .....	9
Champion and Challenger Strategies .....	10
Decision Areas .....	11
TRIAD Design Process .....	12
TRIAD Processing .....	15
Cycle Processing .....	16
Daily Posting .....	17
On-Demand Processing .....	20
Printing Formatted Report Records .....	21
Who Should Use This Manual.....	22
TRIAD's Features, Tailored to your Business .....	23
Other Resources.....	24
Fair, Isaac.....	24
2: Strategic Portfolios .....	25
About Strategic Portfolios .....	25
Role of SPIDs .....	26
Overview of the SPID Assignment Table .....	26
Setting Parameters for a SPID .....	30
3: Behavior Scoring .....	33
About Behavior Scoring .....	33
Terminology.....	34
Scorecard Development .....	36
Identifying Account Categories for Exclusion and Retention .....	36
Odds-to-Score Relationship .....	40
Defining Sub-population Splits .....	41
Developing Characteristics and Attributes .....	42
Producing Preliminary Scorecards .....	42

Scorecard Implementation .....	44
Behavior Score Tally Reports.....	44
Behavior Score Exclusions by SPID .....	45
Behavior Score Distribution By SPID and Scorecard ID .....	46
Behavior Score Distribution by SPID, Delinquency, and Credit or Cash Utilization ....	49
Scorecard Performance Reports .....	53
Performance by Score Reports .....	54
Behavior Score by Credit Bureau Score by SPID .....	58
4: Strategy Development .....	61
About Strategy Development.....	61
Strategy Tables and Trees .....	61
How Strategies are Represented .....	62
Table to Tree .....	63
Elements of a Strategy .....	63
Strategy Element One: Triggers .....	64
Strategy Element Two: Strategy Keys .....	66
Strategy Element Three: Designing Strategies .....	67
Strategy Element Four: Scenarios .....	67
Strategy Element Five: Strategy IDs .....	69
Creating Sample Strategies .....	70
Creating the Pseudo-Champion .....	70
Creating the Challenger .....	71
Strategy Evaluation Tools .....	80
The Audit Program .....	80
Estimator Programs and Reports .....	81
5: Strategy Assignment .....	87
About Strategy Assignment.....	87
Strategy IDs .....	88
Random Digit Groups .....	88
Random Digit Assignment .....	88
Random Digit Ranges .....	89
Champion/Challenger Strategies .....	90
6: Strategy Performance Reporting .....	93
About the Strategy Performance Reports .....	93
Report Layout .....	93
Report Headings .....	94
The Report: First Page.....	95
Field Reference for Page 1 .....	97
The Report: Second Page.....	99
Field Reference for Page 2 .....	101
The Report: Third Page.....	103
Field Reference for Page 3 .....	105



7: Credit Line Management .....	109
About the Credit Line Management Decision Area.....	109
Configuring Options .....	110
Triggers.....	113
Primary Triggers .....	113
Credit Line Management Strategies .....	115
Table and Tree .....	115
Sample Strategy Keys .....	117
Credit Line Management Scenarios .....	118
Action One: Changing a Credit Line .....	119
Action Two: Notifying the Customer .....	123
Action Three: Waiving Overlimit Fees .....	123
Calculating a New Cash Line .....	124
Decreasing a Non-Delinquent Account .....	124
Credit Line Management Outcomes Reporting.....	125
List of Cycle Tally Reports .....	126
Outcomes by SPID and Behavior Score .....	127
Outcomes by SPID, Digit Group and Scenario .....	129
Outcomes by SPID and Digit Group .....	131
Distribution by SPID, Digit Group, and Behavior Score .....	133
Distribution by SPID, Digit Group, and Old Credit/Cash Line .....	135
Credit Line Management Estimator Reports .....	137
8: Delinquent Collections .....	143
About the Delinquent Collections Decision Area.....	143
Configuring Options.....	145
Exclusions.....	145
Delinquent Collections Triggers .....	146
Scenario Triggers .....	146
Reclassification Triggers .....	147
Delinquent Collections Strategies.....	147
Table and Tree .....	148
Sample Strategy Keys .....	149
Delinquent Collections Scenarios .....	150
Scenario Fields .....	151
Dynamic Reclassification .....	153
Timing .....	153
Downward Reclassification .....	154
Upward Reclassification .....	154
Examples of Delinquent Accounts .....	155
Delinquent Collections Outcomes Reporting .....	157
Delinquent Outcomes by SPID, Delinquency Level, and Digit Group .....	158
Delinquent Outcomes by SPID, Digit Group, and Scenario .....	160
Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario .....	162
Delinquent Collections Performance Reporting.....	164

Delinquent Account Status Transition Matrix by SPID and Digit Group .....	165
Delinquent Balance Status Transition Matrix by SPID and Digit Group .....	167
Delinquent Collections Estimator Reports .....	169
9: Overlimit Collections .....	175
About the Overlimit Collections Decision Area .....	175
Configuring Options .....	176
Exclusions .....	176
Overlimit Collections Triggers .....	177
Percent Utilization (Breakpoint) Triggers .....	177
Crossing a Breakpoint .....	178
Cash Lines .....	179
Credit Line Tally or Cash Line Tally? .....	179
Overlimit Collections Strategies .....	180
Table and Tree .....	180
Sample Strategy Keys .....	182
Overlimit Scenarios .....	183
Scenario Fields .....	184
Overlimit Outcomes Reporting .....	186
Outcomes by SPID and Digit Group .....	187
Outcomes by SPID, Digit Group, and Scenario .....	189
Overlimit Collections Estimator Reports .....	191
10: Authorizations .....	193
About the Authorizations Decision Area .....	193
Configuring Options .....	194
Exclusions .....	195
Authorization Triggers .....	195
Scenario Triggers .....	195
Cushion Tests .....	197
Percent Fit Test .....	198
How Cushion and Percent Fit Interact .....	198
Authorization Strategies .....	199
Table and Tree .....	199
Sample Strategy Keys .....	200
Authorization Scenarios .....	201
Authorizations Reporting .....	203
Production Schedule .....	203
The Authorization Summary Report .....	203
The Authorization Outcomes Reports .....	206
Authorizations Estimator Reports .....	210
11: Reissue .....	215
About the Reissue Decision Area .....	215
Configuring Options .....	216

Exclusions.....	216
Reissue Triggers .....	217
Reissue Review Points .....	217
Reissue Strategies .....	218
Table and Tree .....	218
Sample Strategy Keys .....	219
Reissue Scenarios.....	220
Reissue Outcomes Reporting.....	222
Outcomes By Digit Group and Scenario .....	223
Outcomes By Digit Group and Behavior Score .....	225
Outcomes By Digit Group and Review Month .....	227
Reissue Estimator Reports .....	228
<b>12: Marketing Communications .....</b>	<b>231</b>
About the Marketing Communications Decision Area .....	231
Configuring Options.....	232
Exclusions.....	232
Marketing Communications Triggers.....	232
Trigger Parameters and Sample Triggers .....	233
Marketing Communications Strategies.....	235
Table and Tree .....	235
Strategy Keys .....	236
Marketing Communications Scenarios .....	238
Marketing Communications Outcomes Reporting .....	239
Trigger Outcomes Report .....	239
Outcomes by Digit Group .....	242
Outcomes by Digit Group and Behavior Score .....	243
Outcomes by Digit Group and Scenario ID .....	244
Marketing Communications Estimator Reports.....	246
<b>13: Performance-based Pricing .....</b>	<b>247</b>
About the Performance-based Pricing Decision Area .....	247
Configuring Options.....	248
Exclusions.....	248
Performance-based Pricing Triggers.....	249
Trigger Parameters and Sample Triggers .....	249
Performance-based Pricing Strategies.....	251
Table and Tree .....	251
Strategy Keys .....	253
Performance-based Pricing Scenarios .....	254
Performance-based Pricing Outcomes Reporting .....	256
Trigger Outcomes Report .....	257
Outcomes by Digit Group .....	259
Outcomes by Digit Group and Behavior Score .....	261
Outcomes by Digit Group and Scenario .....	263

TRIAD 5.0 User's Guide

Outcomes by Digit Group, Scenario and Behavior Score .....	265
Outcomes Rate Transition by Digit Group .....	267
Performance-based Pricing Estimator Reports .....	269
Glossary .....	271
Index .....	i

# 1: Introduction

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## Introducing TRIAD

TRIAD™ is a portfolio management system designed to help reduce losses, increase revenues, and take advantage of promotional opportunities. With TRIAD, your decision-making process can respond quickly to changes in your customer population and the economic environment. You can test new strategies on a small part of a portfolio and still keep your current strategy in place on the majority of the portfolio. TRIAD also provides reporting to measure the effectiveness of competing strategies as they are developed. TRIAD has three components: scoring, strategies, and software.

## Scoring

Behavior scoring is a tool for assessing the future behavior of an account. It works by making a series of calculations that quantify current and past behavior at the account or customer level. Associated with most behavior scores are the odds that the account will perform well in the future. The higher the odds, the better the account is likely to perform.

The behavior score is an invaluable component of a strategy. It lets you use risk as a primary factor in assigning actions. For example, accounts with greater risk can be accelerated to collections; accounts with less risk can be decelerated. Using risk assessment, you can develop more accurate and finely-tuned strategies.

Scoring can be done at the account or customer level. Standard types of Fair, Isaac scores include:

- Standard Behavior Risk
- Payment Projection
- Attrition
- Revenue
- Fraud
- Cross-sell Response

## Strategies

A strategy is a plan for assigning an account to a specific treatment (scenario). TRIAD gives you the ability to compare competing strategies in a statistically valid way, so that you can determine which strategy produces the best results. This type of comparison is called Champion/Challenger Testing. The existing strategy is the Champion; the new strategy is the Challenger.

As a new strategy proves its effectiveness, it can be applied to a greater percentage of your portfolio. When a Challenger becomes your new Champion, the strategy design cycle begins again.

TRIAD strategies continually move through four distinct phases of strategy development:

- Evaluating the results of the strategies used the previous month.
- Developing new strategies or enhancing existing ones based on the evaluation results.
- Testing the new strategies using the Estimator facility.
- Implementing the new strategies in the production environment.

In this design and evaluation process, the most effective strategies can then be promoted to your live environment.

## Software

TRIAD software has PC and mainframe components. Strategies are developed on the PC, using the TRIAD Table Maintenance System (TMS). The TMS includes TreeView™, which gives you a graphical view of strategies, and Scorecard Manager, which lets you view scorecard data and (optionally) to update existing scorecards or add new scorecards. See the *TRIAD Table Maintenance Guide* for more information about the TMS, TreeView, and Scorecard Manager.

Actual TRIAD processing occurs on the mainframe, as a call from your cycle, daily, and authorizations programs. This in-stream architecture makes TRIAD run faster with less impact to your system.

TRIAD uses data areas allocated by the calling program to receive input and return results. TRIAD does not perform input and output functions on your master file or data tables. Instead, it writes only to its own files, primarily the Report Record file. This file contains all TRIAD actions and other information on each account throughout the cycle.

The Report Record file is input to all monthly reporting, as well as ad-hoc reporting. After it is decreased by a user-defined sample factor, the Report Record file also drives the Estimator facility.

## Documentation

For additional information about TRIAD, see the following documents:

- TRIAD Data Processing Guide
- TRIAD Installation Guide
- TRIAD Table Maintenance Guide
- TRIAD Project Guide

On-line Help is also available in the TRIAD Table Maintenance System.

## Working with TRIAD

TRIAD provides a way to group similar accounts and treat them strategically in different decision areas. This section explains basic TRIAD concepts such as Strategic Portfolios, Champion and Challenger testing, decision areas, strategy keys, and scenarios.

### Strategic Portfolios

A strategic portfolio is a group of accounts that can be managed collectively because of common characteristics. Each portfolio is given a 2-digit identification number, called the Strategic Portfolio Identification number or SPID. In practice, the term SPID is used to refer to both the strategic portfolio and its number. Accounts are assigned to SPIDs in the Strategic Portfolio Assignment table.

For example, since Gold and Classic Bankcards have different terms you could group these accounts into separate SPIDs. In the retail environment, different chain stores or geographic regions may require unique SPIDs. In Installment Lending, direct and indirect loans are typically assigned to different SPIDs. Similarly, commercial and residential accounts often require different SPIDs in the utility sector.

For more information about Strategic Portfolio assignment, see the chapter *Strategic Portfolios*.

## Champion and Challenger Strategies

An integral part of TRIAD is the ability to run multiple strategies concurrently, testing new strategies against existing ones. The existing strategy is called the Champion; the new strategy is called the Challenger. Both test groups contain statistically equivalent populations. The key to establishing Champion and Challenger testing is understanding Random Digit Groups and the role of the Strategy Assignment table.

### Random Digit Groups

Each account has a two-digit number between 00 and 99, called a random digit or a test digit. It is assigned when the account is opened or brought into TRIAD. Random digits stay with an account long-term; they change only when the file is re-randomized.

A consecutive series of random digits forms a random digit group. For example, 00 through 04 is a random digit group representing a five percent sample of a portfolio. Random digit groups are assigned to decision area strategies for each portfolio. An identification number, called the Strategy ID, links the strategy to the Random Digit Group. The Strategy ID is assigned in the Strategy Assignment table.

### Strategy Assignment Table

The Strategy Identification number, or Strategy ID, links a strategy to a Random Digit Group and a SPID. The Strategy ID is a 3-digit number with valid values from 001 to 999. Strategy 999 is a system-reserved number that excludes an account from TRIAD treatment in a specific decision area.

For more information about Random Digit Groups see the chapter *Strategy Development* and for the Strategy Assignment table see the chapter *Strategy Assignment*.



## Decision Areas

See table 1 for a listing of TRIAD decision areas.

Table 1: TRIAD decision areas.

Decision Area	Description	Timing
Credit Line Management	Controls credit line and cash line decisions.	Cycle
Delinquent Collections	Manages collections for past due accounts, including those that are past due and over-limit.	Cycle and Daily
Overlimit Collections	Manages collections for current, overlimit accounts.	Cycle and Daily
Authorizations	Controls approve, decline and refer decisions.	Primarily at Authorization, but optionally, batch; administrative tasks at Cycle
Reissue	Determines reissue periods for expiring cards.	Cycle or Stand-alone
Marketing Communications	Manages cross-sell and other communications to the cardholder.	Cycle or Stand-alone
Performance-based Pricing	Adjusts product terms such as annual percentage rate (APR) based on the performance of the account.	Cycle or Stand-alone
Fraud Intercept	Detects potentially fraudulent transactions.	Immediately following Authorization

## TRIAD Design Process

The design process is similar in all TRIAD decision areas. The steps involved are shown in the following figure:

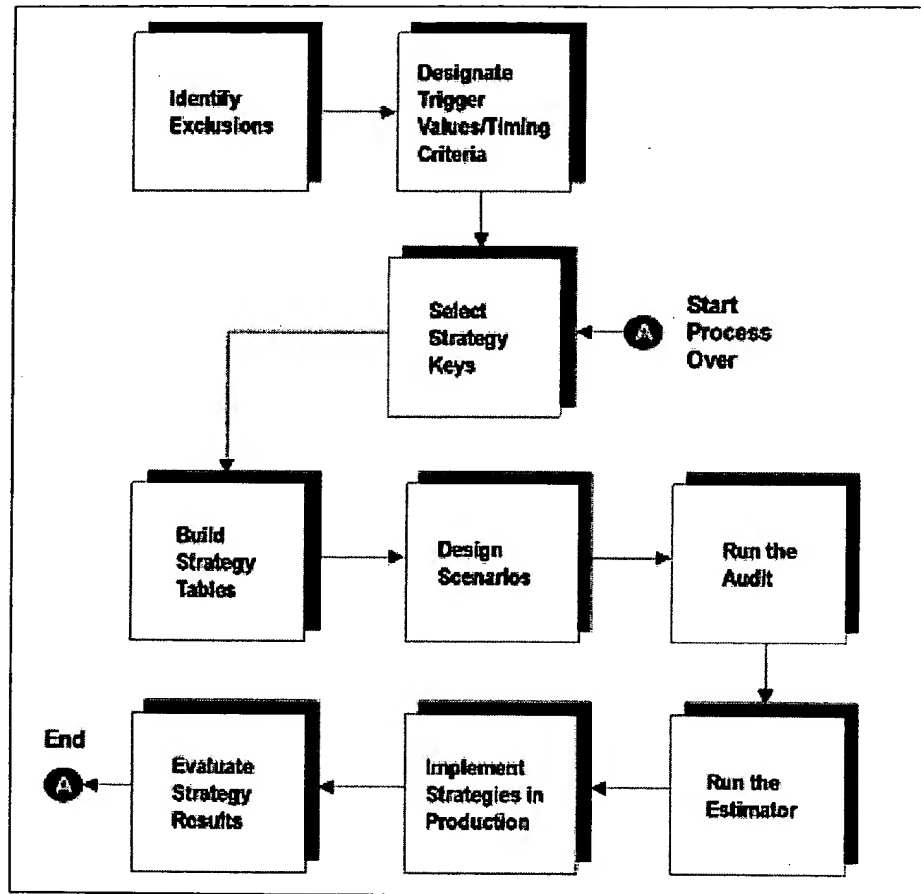


Figure 1: Steps in the TRIAD design process

The steps are described in the following text:

## Identify Exclusions

TRIAD lets you exclude categories of accounts from behavior scoring and each decision area. For example, an inactive account might be excluded from Delinquent Collections, but not excluded from Overlimit Collections, Marketing Communications, or Authorizations. Other exclusions are more generic and are applied before decision area processing. Exclusion categories are defined by you and the design team.

Because exclusions are hard-coded in TRIAD, changing them requires additional programming.

## Designate Triggers

Entry into each decision area is triggered by a primary event, such as being overlimit or delinquent. Further processing in the decision areas is also triggered by events. In the Overlimit Collections decision area, for example, this occurs when crossing an Overlimit Breakpoint. If the first Overlimit Breakpoint is 105% utilization, an overlimit strategy is invoked when that threshold is crossed.

## Select Strategy Keys

Strategy keys sort accounts into groups that receive different treatments. For example, fields such as Cycles Delinquent, Time-On-Books, and Behavior Score, are often used as keys in the Credit Line and Delinquent Collections decision areas.

By using strategy trees, you can separate accounts into tightly defined treatment groups and take actions that balance revenue and risk. For example:

- Account 1 has been open for six months, has a low behavior score and is two cycles delinquent. This account is a candidate for a credit line decrease, not an increase.
- Account 2 has been open 13 months, has a high behavior score and is current. This account is a potential candidate for a credit line increase.

Each decision area accesses a user-defined library of decision keys selected during design meetings. When you build a strategy, you can select a new set of keys from the library or copy an existing set.

For more information about selecting strategy keys, see the *Strategy Development* chapter in this manual and the *TRIAD Table Maintenance Guide*.

## Build Strategy Tables

Strategy tables sort accounts into treatment groups. You can define a strategy in table or tree format. For more information about building strategies, see the *Strategy Development* chapter in this manual and the *TRIAD Table Maintenance Guide*.

## Design Scenarios

Scenarios are actions assigned to each treatment group in a strategy. Actions can range from simple to complex. A simple action can be to take no action at all. A complex action can include setting a block code, sending a letter, setting a collection indicator, and printing a statement message.

## Run the Audit

The Audit program performs a row-by-row and cross-table validation of the control tables. It produces a report showing each table. If the Audit program encounters errors, it produces an Error report. The Audit is available on both the PC and the mainframe.

The Audit program must be run in a test environment when developing a new strategy or modifying control fields. It is run again after uploading tables from PC to mainframe to verify that the upload was successful.

## Run the Estimator

The Estimator programs tally the number of accounts identified by each control table row and the odds (risk quality) for these accounts. The Estimator runs on the mainframe using the development control tables and selected records from the production Report Record file.

## Implement Strategies and Scenarios in Production

When you are satisfied with the Audit and Estimator results, your in-house procedures are used to move strategies into production. Immediately after the move, the Audit program is run to verify that files were not corrupted during the move.

## Evaluate Strategy Results

TRIAD has a full reporting facility that runs weekly or monthly. The reports show strategy and decision area results with extensive behavior score reporting.

## TRIAD Processing

TRIAD processing can occur at various times, such as cycle, daily-posting, weekly or monthly for reporting, on-demand or at transaction time.

The cycle, daily posting, and transaction processing parts of TRIAD fit into your existing systems. The reporting and on-demand jobs can be run on a stand-alone basis.

This section looks at the general case of TRIAD processing; that is, decision areas such as Credit Line Management, Delinquent Collections, and Overlimit Collections. Other decision areas, such as Reissue, Marketing Communications, and Performance-based Pricing, can be run on-demand or as a part of the regularly-scheduled cycle processing. For information on how these decision areas run in your installation, see your *TRIAD Project Guide*. Authorizations and Fraud Intercept run as a part of your Authorization System or may be run in a batch environment. For more information about TRIAD processing, see the *TRIAD Data Processing Guide*.

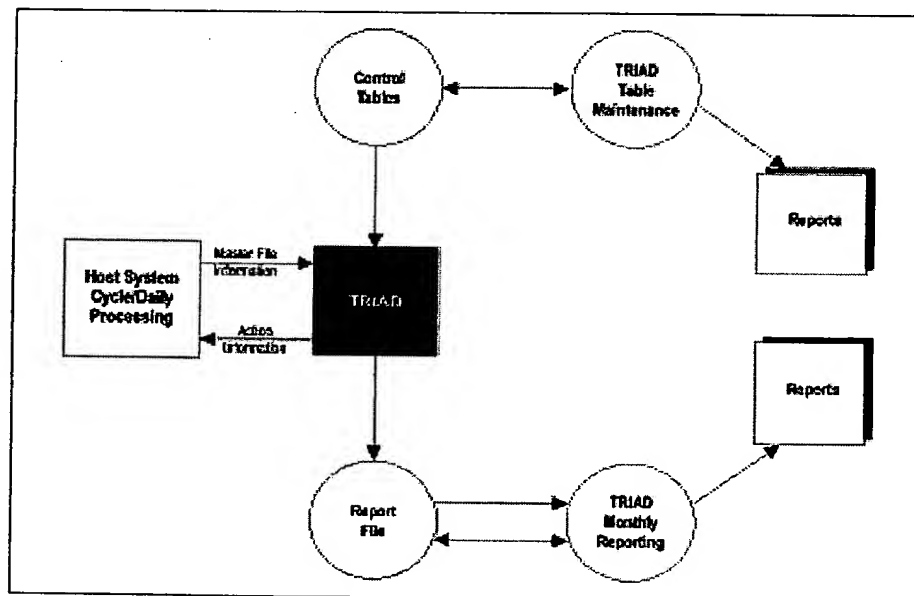


Figure 2: TRIAD processing work flow for all decision areas.

## Cycle Processing

Cycle processing is the periodic review of the account when a statement is written and financials and delinquency are aged. Typically, this is once a month, although some portfolios have different timing. At cycle, TRIAD is called to compute a new behavior score, sort accounts into treatment groups, and return a set of actions. All actions determined at cycle are written to the Report Record file. The records generated at cycle are input to TRIAD's weekly or monthly Outcomes and Performance reports. After the file is pared down by a sample factor of your choice, the resulting file is input to the Estimator process.

The order of processing at cycle may be:

1. Assign the account to a strategic portfolio (SPID).
2. Assign strategy IDs for the decision areas, including Authorizations (if applicable).
3. Calculate the behavior score.
4. Review the account for Credit Line actions.
5. Review the account for Delinquent Collections actions.
6. Review the account for Overlimit actions.
7. Write to the Report Record file.
8. Return actions and other data to the calling program.

After the new behavior score has been calculated, it is used in subsequent processing. Similarly, if a new credit line is calculated, it is used in subsequent processing. After all the decision area processing has been completed, TRIAD returns actions and other data, such as behavior score and new credit line, to the calling program. The calling program must implement the actions and store all the data.

Your order of processing may vary from this. For example, scoring using other types of scorecards may precede the review of accounts by an associated decision area.

The addition of other decision areas may add other reviews to the account during cycle processing; for example, a Reissue or Marketing Communications decision area. These areas can be run as stand-alone jobs, or as a part of cycle processing.

## Daily Posting

Accounts that are delinquent or overlimit are treated by TRIAD during daily posting. TRIAD first determines if the account fits into an excluded category. If it does, it is not processed. The classic example in Delinquent Collections is an account that was delinquent at cycle, but has now been reclassified as bankrupt. If bankruptcy is an exclusion, the account will not be processed. However, a non-excluded delinquent or overlimit account may receive one or more of the following actions:

- Setting a block code
- Queuing the account to collections
- Sending a letter
- Taking no action

TRIAD records all actions in the Report Record file for use in Outcomes reports.

## Transaction Processing

The Authorization and Fraud decision areas are transaction-based. They run as a part of your on-line Authorization system or, optionally, in a batch environment. Reporting and Estimator functions run in batch mode.

## Reporting

TRIAD uses the Report Record file to create a variety of reports, including the Outcomes reports, Performance reports, Estimator reports, and the Formatted Report Record report. The Estimator reports and Formatted Report Record report are generated on-demand. Outcomes and Performance reports are regularly scheduled reports that are run monthly or weekly. A weekly run can produce reports but more often it is used as an intermediate step to consolidate Report Records. This consolidation step minimizes your month-end processing time.

Because the Outcomes and Performance reports contain sum-of-cycle data, and not point-in-time month-end data, the numbers may not foot with traditional month-end reports provided by systems external to TRIAD.

## Outcomes Reports

Outcomes reports tally counts and amounts. If you want to know how many letters were sent as a result of actions from Delinquent or Overlimit Collections scenarios, the Outcomes reports for those decision areas contain that information. Similarly, they show behavior score distributions and exposure changes resulting from credit line changes.

Table 2: TRIAD Outcomes reports.

Chapter Reference	Report Name
Chapter 3	Behavior Score Exclusions by SPID
Chapter 3	Behavior Score Distribution by SPID and Scorecard ID
Chapter 3	Behavior Score Distribution by SPID, Delinquency, and Credit Utilization
Chapter 3	Behavior Score Distribution by SPID, Delinquency and Cash Utilization
Chapter 7	Credit Line Outcomes by SPID and Behavior Score
Chapter 7	Credit Line Outcomes by SPID, Digit Group, and Scenario
Chapter 7	Credit Line Outcomes by SPID and Digit Group
Chapter 7	Credit Line Distribution by SPID, Digit Group and Behavior Score
Chapter 7	Credit Line Distribution by SPID, Digit Group and Old Credit Line
Chapter 7	Cash Line Outcomes by SPID and Behavior Score
Chapter 7	Cash Line Outcomes by SPID, Digit Group, and Scenario
Chapter 7	Cash Line Outcomes by SPID and Digit Group
Chapter 7	Cash Line Distribution by SPID, Digit Group and Behavior Score
Chapter 7	Cash Line Distribution by SPID, Digit Group and Old Cash Line
Chapter 8	Delinquent Outcomes by SPID, Delinquency Level, and Digit Group
Chapter 8	Delinquent Outcomes by SPID, Digit Group and Scenario
Chapter 8	Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario
Chapter 9	Over Credit Line Outcomes by SPID and Digit Group
Chapter 9	Over Credit Line Outcomes by SPID, Digit Group and Scenario
Chapter 9	Over Cash Line Outcomes by SPID and Digit Group
Chapter 9	Over Cash Line Outcomes by SPID, Digit Group and Scenario



Table 2: TRIAD Outcomes reports. (continued)

Chapter 10	Authorization Summary
Chapter 10	Authorization Outcomes by Digit Group and Behavior Score
Chapter 10	Authorization Outcomes by Scenario and Behavior Score
Chapter 11	Reissue Outcomes by Digit Group and Scenario
Chapter 11	Reissue Outcomes by Review Month and Digit Group
Chapter 12	Marketing Communications Trigger Outcomes
Chapter 12	Marketing Communications Outcomes by Digit Group
Chapter 12	Marketing Communications Outcomes by Digit Group and Behavior Score
Chapter 12	Marketing Communications Outcomes by Digit Group and Scenario
Chapter 13	Performance-based Pricing Trigger Outcomes
Chapter 13	Performance-based Outcomes by Digit Group
Chapter 13	Performance-based Outcomes by Digit Group and Behavior Score
Chapter 13	Performance-based Outcomes by Digit Group and Scenario
Chapter 13	Performance-based Outcomes by Digit Group, Scenario, and Behavior Score
Chapter 13	Performance-based Outcomes Rate Transition by Digit Group

## Performance Reports

TRIAD has several types of Performance reports. The Strategy Performance report compares overall performance across decision areas. The Scorecard Performance reports monitor the performance of the scorecards over time. The Delinquent Account Status Transition Matrix reports monitor the movement of an account from one stage of delinquency to the next.

Table 3: TRIAD Performance reports.

Chapter Reference	Report Name
Chapter 6	Strategy Performance Report by SPID, Digit Group and Time on Books
Chapter 6	Strategy Performance Report by SPID, Digit Group and Behavior Score
Chapter 3	Scorecard Performance Report: Behavior Score by SPID and Scorecard ID
Chapter 3	Scorecard Performance Report: Raw Score by SPID and Scorecard ID
Chapter 3	Credit Bureau Score Performance Report: Credit Bureau Score by SPID
Chapter 3	Behavior Score by Credit Bureau Score by SPID
Chapter 8	Delinquent Account Status Transition Matrix by SPID and Digit Group
Chapter 8	Delinquent Balance Status Transition Matrix by SPID and Digit Group

## On-Demand Processing

On-demand processing in TRIAD refers primarily to running the Audit program, the Estimator program and reports, and printing Formatted Report Records. It also means updating the control tables in the PC-based TRIAD Table Maintenance System or running decision areas such as Reissue and Marketing Communications whenever desired.

## Control Tables

TRIAD uses a series of control tables as input to processing. The tables define all the system parameters, including decision area strategies and scenarios, reporting parameters, system control fields, and scorecard assignment keys.

## The Audit Program

The Audit program performs row-by-row and cross-table validations of the control tables and produces Audit reports. The reports are a series of table images. If the Audit program encounters an error, it generates an Audit Error report or Audit Debug report. You can print all the Audit and Audit Error reports in the TRIAD Table Maintenance System.

## The Estimator Reports

The Estimator reports show the number of accounts in each row of the development control tables and the good/bad odds associated with the row. The Estimator is run using a user-defined sample number of records from the production Report Record file. It is a valuable tool in determining the impact that a strategy will have operationally and on the bottom line. It can be run at any time and should always be run before implementing new tables.

Estimator reports are discussed in more detail in the chapter on Strategy Development in this manual. Some features of the Estimator reports are specific to each decision area and are discussed in each decision area chapter.

You can modify Estimator parameters in the TMS (see the chapter *Creating Strategies* in the *TRIAD Table Maintenance Guide*). These parameters are uploaded to the mainframe along with your control tables. The actual Estimator program runs on the mainframe.

## Printing Formatted Report Records

All report records can be formatted in a user-friendly layout and printed. For testing purposes, the following three additional types of records can be generated for most decision areas:

- Score Test records - show the calculated values of all characteristics used to generate the score for that account.
- Pass/Return Test records - give the values of the Pass and Return fields used in the linkage between TRIAD and your system.
- Strategy Key Test records - give the calculated values of all keys used in the decision area strategies for that account.

To enable this feature, go to the Client Parameters table and check any or all of the Test Record fields. Be sure to disable this feature in production. For more information on how to set these fields, see the *TRIAD Table Maintenance Guide*. Your systems personnel will be able to produce this report with directions found in the *TRIAD Data Processing Guide*.

## Who Should Use This Manual

This manual is intended for people who are working with mainframe TRIAD or the TRIAD Table Maintenance System to process customer or account information. These activities may include any of the steps in the TRIAD design and evaluation process listed earlier in this chapter. We recommend that you read through the manual, especially Chapters 1 through 6, before you begin using TRIAD.

## TRIAD's Features, Tailored to your Business

TRIAD has several features which are tailored or modified for your company through a process involving your personnel and consultants from Fair, Isaac. The tailored features for your installation are shown in your *TRIAD Project Guide*. Table 4 on page 23 shows some of the most significant tailored features.

Table 4: Features of TRIAD which can be tailored to your business.

Behavior scorecards	Rank order accounts/customers according to the likelihood of certain behavior occurring in the future.
SPID assignment keys	Determine strategic portfolio assignments.
Scorecard assignment keys	Determine scorecard assignments.
Strategy keys	Sort the accounts into treatment groups.
Scenarios	Define actions taken on accounts in each decision area.
Exclusions	Define criteria for excluding accounts from behavior scoring and decision areas.
Triggers	Determine whether an account will be treated in a decision area.
Mapping	Establishes correspondence between TRIAD fields and master file database fields.
Control Fields	Establish the way your system communicates with TRIAD.

These features or others may be customized (modified extensively under contractual agreement) for your installation. All examples given in this manual are generic and specific information may vary in your installation.

All examples given refer to a single client environment. If you process multiple clients, some examples will be different in your environment.

## Other Resources

A number of services are available from Fair, Isaac. They are described in the following table.

Table 5: Services available from Fair, Isaac.

Software consulting	Included in your contract with Fair, Isaac may be a limited amount of consulting time to set up and implement TRIAD. Additional consulting time can be arranged by contract.
Scorecard and Strategy design and reevaluation	Fair, Isaac consultants can assist the risk manager in the use of TRIAD.
Software enhancements	Periodically, Fair, Isaac offers enhancements to the TRIAD software. This service is available under separate contract or it may be included in your contract.
Conferences and seminars	Fair, Isaac offers conferences and seminars on their entire product line. You will receive announcements concerning these events, or you can contact Fair, Isaac directly for a schedule.

## Fair, Isaac

TRIAD and behavior scoring were developed by Fair, Isaac. Established in 1956, we are a pioneer and world leader in the development of rule-based control systems, products, and services for the credit industry. We also produce control systems for utilities, insurance underwriters, and other industries.

## 2: Strategic Portfolios

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### About Strategic Portfolios

A strategic portfolio is a group of accounts that can be managed collectively because of common characteristics. The following examples illustrate how accounts might be separated into strategic portfolios:

- Each division of a retail company
- Multiple companies for whom you process receivables
- Residential and commercial utility customers
- Gold and Classic bankcard portfolios
- Direct and indirect installment loans
- Basic gas card and gas card with travel club benefits
- Purchase and lease for installment lending

Each portfolio has a 2-digit identification number. Both the strategic portfolio and the strategic portfolio number are referred to as a Strategic Portfolio Identification number or SPID.

When TRIAD is tailored for your company, the credit managers in consultation with your Fair, Isaac representative, determine which portfolio divisions best suit your company's needs. After the portfolios are determined, the Strategic Portfolio Assignment keys must be identified. These keys become a part of the SPID Assignment table in the TRIAD Table Maintenance System (TMS). For more information about the mechanics of assigning an account to a SPID, see the *TRIAD Table Maintenance Guide*.

New portfolios can be added without additional coding if they can be identified by existing keys. If new accounts are acquired or a new type of account is developed, these accounts must also be assigned to a new or existing strategic portfolio.

You can define up to ninety-eight SPIDs. However, it is best to keep the number to a minimum. If you have a large number of portfolios, you may have difficulty in maintaining control of the strategies and keeping track of the reports. In addition, you may not have enough accounts in the SPID to obtain meaningful results when you subdivide the SPID into Champion and Chal-

lenger strategies.

SPID 99 is reserved by TRIAD for accounts excluded from treatment. For example, accounts whose receivables you do not own are often assigned to SPID 99.

## Role of SPIDs

SPIDs are an integral part of TRIAD. Many of the control parameter assignments and all reporting is done by SPID. As you can see in the following list, SPIDs are the basis of TRIAD processing:

- Champion and Challenger strategies in the Strategy Assignment table are assigned by SPID and digit group.
- Scorecards in the Scorecard Assignment table are assigned by SPID.
- The values used in the profitability calculation are assigned by SPID in the Strategic Portfolio Control table.
- Estimator sampling factors for both the Authorization and the standard Estimator reports are assigned by SPID in the Strategic Portfolio Control table.
- Credit bureau cut-off attributes are assigned by SPID in the Strategic Portfolio Control table.
- All standard TRIAD reports are sorted by SPID.

Because so much depends on the SPID, do not make unnecessary changes to your portfolio assignments after TRIAD processing begins. Both outcomes and performance reports, which track activity over time, are affected if accounts are moved from one portfolio to another.

## Overview of the SPID Assignment Table

Accounts are assigned to SPIDs in the Strategic Portfolio ID Assignment table as seen in figure 1 on page 27. The table consists of the SPID Assignment keys and the resulting SPID assignment. The purpose of this section is to describe the theory behind the table. For information about entering data into the table, see the *TRIAD Table Maintenance Guide*.



The screenshot shows a window titled "Strategic Portfolio ID Assignment" with a sub-header "Environment Name: TEST" and a "Close" button. The table below lists various product and type codes mapped to specific SPIDs.

Product Code	Type Code	SPID
00	000	99
01	000	01
01	010	02
01	021	01
02	000	03
02	012	01
02	050	03
03	000	99
05	007	01
09	100	02
0	0	2

At the bottom of the window, it indicates "1 of 10" records.

Figure 1: The SPID Assignment table.

Strategic portfolio assignment keys consist of account information that determines the SPID assignment for an account. For example, the SPID Assignment table in figure 1 has two SPID assignment keys: Product Code and Type Code. The account's product code and type code are specific values that define how an account is assigned to a SPID. Up to five keys can be used to determine SPID assignment. The example has three SPIDs:

- Bankcard Division (SPID 01)
- Private Label Division (SPID 02)
- Line-of-Credit Division (SPID 03)

For example, an account with a Product Code of 02 and a Type Code of 050 is assigned to SPID 03.

## Key Ranges

Table key information must be entered as ranges rather than as discrete numbers. The bottom end of the range, not the top, is entered.

The first step is to list discrete key values numerically in ascending sequence. As shown in table 1, the key fields are Product Code and Type Code. Product Code is the main sort key. Type Codes are sorted in ascending sequence within each Product Code. The resulting SPID assignment is shown in the third column.

Table 1: A list of fictitious accounts organized by product code and type code.

Product Code	Type Code	SPID
01	002	01
01	003	01
01	005	01
01	010	02
01	020	02
01	021	01
02	001	03
02	012	01
02	050	03
05	006	99
05	007	01
05	100	02

Next, group the codes in ranges. For example, the first three type codes are included in one range, 000-009. Table 2 on page 29 shows the data from table 1 grouped into ranges.

Table 2: A list of fictitious accounts grouped by code ranges.

Product Code	Type Code	SPID
01 - 01	000 - 009	01
01 - 01	010 - 020	02
01 - 01	021 - 999	01
02 - 04	000 - 011	03
02 - 04	012 - 049	01
02 - 04	050 - 999	03
05 - 99	000 - 006	99
05 - 99	007 - 099	01
05 - 99	100 - 999	02

Finally, the lower-bound value of each range is entered into the table as shown in figure 1 on page 27.

## Setting Parameters for a SPID

The Strategic Portfolio Control table in figure 2 on page 30 contains the parameters that apply to all accounts in a SPID.

Environment Name: **TEST** Close

SPID: ☒ First Month Scored (YYYYMM): **199712** CB Attribute Cutoffs: **9/9/9**

Name: **REGULAR VISA-MASTERCARD** Estimator Sample Pct: **020**

	M/C	Visa	Other
Cash Adv. Interchange Fee:	002.050000	001.450000	002.050000
Cash Interchange Percentage:	000.010000	000.101000	002.050000
March Interchange Fee:	000.010000	000.075000	002.050000
March Interchange Percentage:	001.250000	001.450000	002.050000

	1 Cye Delq	2 Cye Delq	3+ Cye Delq
Collection Expense Per Month:	000.885000	000.050000	010.050000
Acct Processing Exp Per Month:	002.050000		
Annual Cost of Funds Percentage:	000.875000		

	Recovery	Fixed	Other
Recovery Percentage:	003.112341	000.330000	007.390000

Report Type1	Report Type2	Report Type3	Report Type4	Report Type5	Report Type6	Report Type7	Report Type8	Report Type9	Report Type10
020	050	100	100	100	100	100	100	100	100

Record 1 of 1

Figure 2: The SPID Portfolio Control table.

SPID control tables vary among installations. The individual fields are discussed in the *TRIAD Table Maintenance Guide*. The areas of greatest variance are shown in table 3.

Table 3: Factors that vary the most across installations of TRIAD.

First Month Scored (YYYYMM)	The month and year in which all the accounts in this SPID will have a score calculated.
CB Attribute Cutoffs	<p>The values provided from your ScoreNet® run. ScoreNet is a credit bureau score delivery service provided by Fair, Isaac in the North American market.</p> <p>Each of the four codified attributes corresponds to a specific type of ScoreNet credit bureau information. Any account having a codified value equal to or greater than the specified value in the cut-off field will be excluded automatically from credit line increase.</p> <p>If your installation does not use ScoreNet, these fields are gray and you cannot enter data.</p>
Estimator Sample Pct	The percentage of report records to be processed for Estimator Reports other than Authorizations decision area.

Table 3: Factors that vary the most across installations of TRIAD. (continued)

Profit Fields	<p>The twenty profit fields are user-defined. The sample in Figure 2.4 shows a configuration for a Bankcard portfolio with an additional private label portfolio.</p> <p>These fields are used to calculate relative profitability. The profitability numbers are shown in the Strategy Performance reports.</p>
Auths Estimator Sample Pct / Report Type	<p>The percentage of transactions in this report type input to the Authorization Estimator reports.</p> <p>If your installation does not use the Authorizations decision area, these fields are gray and you cannot enter data.</p>

## TRIAD 5.0 User's Guide

## 3: Behavior Scoring

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### About Behavior Scoring

This chapter presents a brief overview of the procedures to develop, implement, and track the performance of behavior scorecards. A behavior score quantifies ever-changing credit risk at the individual account or customer level by summarizing the risk into a single number. It does so by analyzing a series of risk predictors, such as payment, delinquency, and usage patterns.

The behavior score helps you make decisions about an account relative to the risk it presents. With this ability, you can increase revenue by promoting usage and loyalty among low risk accounts. You can also limit potential losses on high risk accounts by blocking further usage and recovering as much of the outstanding balance as possible.

The term behavior scorecard encompasses several types of scorecards offered by Fair, Isaac (see table 1). Each can be built at the account or customer level.

Table 1: Fair, Isaac scorecards.

Standard Behavior (Risk) Score	Predicts the probability of an account remaining good; for example, not reaching an advanced state of delinquency or becoming bankrupt or charged off.
Payment Projection	Predicts the probability of recovery or the possible percentage to be recovered from accounts in advanced stages of delinquency.
Attrition	Predicts the probability of an account becoming inactive or closing.
Revenue	Predicts the amount of revenue an account is likely to produce.
Fraud	Predicts the probability this transaction is fraudulent.
Cross-sell Response	Predicts the probability of success in a cross-sell campaign.

Throughout the chapter, behavior scorecards are used as examples. However, the terminology, procedures, and reports described here pertain to most types of scorecards.

## Terminology

An important part of understanding the scoring process is understanding scoring terminology. Each of these terms is explained in greater detail during the scorecard development process.

Table 2: Basic scorecard terminology.

Aligned Score	A raw score with alignment factors applied. It is also called the behavior score.
Attribute	Range of values for a characteristic. Each attribute range has an associated weight that contributes to the raw score.
Characteristic	A measurement of account behavior. Essentially, it poses a question about an account. For example, the Time-on-Books characteristic asks, "How long has this account been open?" A characteristic may be: A primitive data element such as Highest Delinquency Lifetime, or A combination of data fields; such as Percent of Payments Greater than Amount Due Over the Last Five Months. Each characteristic is divided into ranges of values called attributes.
Divergence	A relative measure of the strengths of a scorecard. In simple terms, it is the separation between goods and bads.
Observation Date	Date from which predictors are generated.
Odds	The number of goods per bad.
Odds-to-Score	The relationship of the odds to the score, such as odds of 60 to 1 at a score of 600. The odds-to-score relationship is determined during the scorecard delivery meeting. May also be referred to as scaling.
PDO	Points to double the odds. If a score of 580 has associated odds of 30 to 1 and a score of 600 has odds of 60 to 1, twenty points in a score doubles the odds. The PDO is determined during the scorecard delivery meeting.
Performance Date	Date <i>n</i> months after the observation date. At this time, the performance of each account in the development sample is defined.



Table 2: Basic scorecard terminology. (continued)

Performance Definition	Definition of what is being predicted. Behavior scorecards use different performance definitions because they predict different things. For example, a standard behavior scorecard measures risk. The performance definition classifies accounts as good, bad, or indeterminate. Typically, a good account is defined as "not worse than current or 1-cycle delinquent in a future time period." A bad account typically becomes charged-off, bankrupt, or reaches an advanced stage of delinquency in the same time period. An indeterminate account is neither good nor bad. Payment projection cards use a different performance definition. These scorecards predict the amount or percentage of repayment from an account already in an advanced state of delinquency (bankcard or retail) or purchase repossession (installment lending). At this point, the entire population is bad, by the risk definition. The goal of the payment projection scorecard is to identify accounts that are most likely to repay all or part of their delinquent balances.
Performance Period or Window	Length of time between the observation date and the performance date. Often for standard bankcard and retail behavior scorecards, this period is six months. Once the behavior scorecards have been implemented, this term refers to the amount of time over which the performance of the scorecards is examined.
Raw Score	Sum of the weights for all characteristics in a scorecard.
Scorecard	A table referencing predictive variables, called characteristics, and associated attribute ranges and weights.
Weight	Value assigned to an attribute range.

## Scorecard Development

This section presents a simplified overview of the scorecard development, a complex process requiring intensive analysis of your data. This section describes the process from the time the development data sample is received at Fair, Isaac.

General procedures for scorecard development are as follows:

- Identifying account categories for exclusion and retention
- Defining the performance window
- Defining scorecard performance measures
- Defining the odds-to-score relationship
- Defining sub-population splits
- Developing characteristics and attributes
- Producing preliminary scorecards

### Identifying Account Categories for Exclusion and Retention

Sometimes, it is not appropriate to calculate a behavior score. If an account is in an advanced state of delinquency, a standard risk score will not help you determine if you should send the account to an agency or try to collect it using internal resources. But a payment projection score will help you make that decision. This account will be excluded from risk scoring.

Some accounts do not need a behavior score to predict future bad performance. If an account is bankrupt or charged-off at scoring it will remain in that status going forward and be classified as a bad account. Accounts that are already bad are excluded from risk scoring. Other types of exclusions may include accounts that are in some unusual status causing delinquency and payment patterns to appear abnormal (deceased, dispute) or accounts that are subject to special treatment.

Similarly, if an account has had no activity for several cycles, a new score may not provide as good a measure of performance as a score calculated before the account became inactive. When the existing score is used instead of a newly-calculated score, the score is said to be retained.

Exclusion and retention categories are determined during the scorecard design meeting. The categories are described in detail in the *TRIAD Project Guide*.

## Exclusions from Behavior Scoring

TRIAD does not calculate a behavior score for accounts that meet the criteria for scoring exclusion categories. Instead, it moves a special, user-assigned code to the Aligned Behavior Score and Raw Behavior Score fields and zeroes to the Scorecard ID field. The user-assigned code is a number between 1 and 30. You can use this code as you would a behavior score, to segregate categories of exclusions for special treatment in a strategy.

Accounts that are excluded from scoring this cycle, are not automatically excluded from future scoring or from decision area processing. Excluded accounts are tallied in the Behavior Score Exclusion report. In the previous example, an inactive account may not be scored, but it should still be allowed in the following decision areas:

- Marketing Communications, to attempt to re-activate it
- Overlimit Collections, if it re-activates and exceeds its credit or cash limit
- Fraud Intercept, if it re-activates and is used fraudulently

The list of exclusions is hierarchical. If an account qualifies for exclusion in more than one exclusion category, it is excluded for the first reason encountered. For example, if an account is both bankrupt and charged-off and the hierarchy positions bankrupt before charged-off, bankruptcy becomes the exclusion code. It is then tallied in monthly reports as a bankruptcy exclusion.

## Retaining a Score

Retaining a score means using the prior cycle's score during the current cycle instead of calculating a new score using current information or excluding the account from scoring. A score may be retained for a number of reasons. Short term inactivity is the foremost retention reason.

When a score is retained, the prior cycle's aligned and raw scores are aged into the current cycle's scoring fields. For example, consider an account with an aligned score of 657 that has been inactive four months. This period of inactivity triggers score retention. When the score fields are aged, what will they contain? Table 3 on page 38 answers this question.

Table 3: Contents of aged score fields.

Scoring field	Previous month	Current month
Aligned Score	657	657
Raw Score	657	657
Scorecard ID	002	932

The Aligned and Raw Score fields retain their previous, scored value of 657. The Scorecard ID field contains the retention reason code (32) with a prefix of 9 (this prefix may vary in your installation). If the account does not have a valid score to age, a special user-defined value, such as 031, is moved to the Raw Score and Aligned Score. The Scorecard ID field will contain 931. The retention codes are assigned in the Retention Reasons and Score area of the System Control Fields table in the *TRIAD Table Maintenance System*.

### Scoring Accounts Excluded from Scorecard Development

Accounts that are open one or two months at the time of scoring do not have the full financial history needed to calculate a score. Newly booked accounts are excluded from the datasets used to develop behavior scorecards. However, the scorecards may be used later to score newly booked accounts at implementation.

Accounts that are excluded from scorecard development but scored later in implementation are tracked separately in TRIAD. The calculated score is moved to the Raw Behavior Score field. The Scorecard ID field contains a number that is 800 plus the number of the scorecard used to calculate the score. For example, if the newly booked account is scored using scorecard 002, then the Scorecard ID field will store 802.

The Behavior Score Distribution Report by SPID and Scorecard ID will have separate columns for Scorecard ID 801, 802, and so on. The Scorecard Performance reports will have separate pages for Scorecard ID 801, 802, and so on. These Scorecard ID values may vary for your installation. See your *TRIAD Project Guide* for details.

## Defining the Performance Window

In scorecard development, the performance window is the period between the observation date and the performance date. Often this is a six month period. In implementation, this length of time is the full period reported on the Scorecard Performance reports. During this period of time, the performance of the account is determined.

## Defining Scorecard Performance Measures

Each type of scorecard has its own performance measure, depending on what is being predicted. In a behavior risk scorecard, the performance of an account is defined as good or bad in terms of risk. Once the definition is established, accounts are classified as goods (low risk) or bads (high risk). If an account does not fit into either definition, it is an indeterminate.

### Goods

Accounts that remained satisfactory throughout the performance period. Often, an account is defined as a good if it has either:

- Remained current throughout the performance window.
- Not been more than "n" times 1-cycle delinquent during that time period; for example, three times 1-cycle delinquent.

### Bads

Accounts that became unsatisfactory during the performance period.

Frequently, a bad account is one that became bankrupt, charged-off, canceled, or had merchandise repossessed during the performance period. Reaching a high level of delinquency, such as three or more cycles, also qualifies as a bad.

### Indeterminates

Accounts that did not qualify as good or bad during the performance period are called indeterminates.

Indeterminates act as a buffer area between goods and bads.

### Performance Exclusions

A special category called Performance Exclusions is defined for accounts requiring separate performance tracking. Some accounts are in an unusual status where it is difficult or impossible to accurately assign good, bad or indeterminate performance. An example is a credit card that is reported as lost or stolen during the performance period. The financial record during the performance period may show bad performance, but the activity is not controlled by the original cardholder.

The performance of every scored account is processed and classified, so the accounts are not omitted or excluded from TRIAD. Any account identified as a Performance Exclusion during the performance period is not tallied in the Scorecard Performance report.

### Odds-to-Score Relationship

At the scorecard delivery meeting, you establish the odds-to-score relationship. Scorecards are often scaled such that a score of 600 has odds of 60 to 1. The odds indicate the probability that an account will or will not reach an unsatisfactory condition over the next specified number of months. Odds of 60 to 1 at 600 mean that out of 61 accounts with a score of 600, 60 will remain satisfactory and 1 will not. The odds cannot tell you which account out of the 61 will be the one that becomes bad. Table 4 shows a sample odds-to-score relationship.

Table 4: A sample odds-to-score relationship table.

Score	Odds
600	60/1
580	30/1
560	15/1
540	7.5/1
520	3.75/1
500	1.88/1

Notice that the odds double for every 20-point increase in score. A score of 540 has associated odds of 7.5 to 1. A score of 560 has odds of 15 to 1, double the odds at the previous score. The number of Points to Double the Odds, PDO, is decided at the delivery meeting. After the scorecards are implemented, you can track the odds-to-score relationship on the Scorecard Performance report. If you see that it is starting to drift, contact your Fair, Isaac representative for a scorecard alignment.

## Defining Sub-population Splits

Risk for different populations can best be assessed by custom, tailored scorecards. Predictive and robust scorecards can be built using small and homogeneous sub-populations. The more homogeneous the sub-population, the more predictive the scorecard will be for that group of accounts. The behavior and risk trends within a sub-population can be characterized by unique sets of predictive characteristics. Using a scorecard developed for one sub-population on a very different sub-population will not yield satisfactory results. For example, a scorecard that depends heavily on analysis of past delinquency would not perform well for a clean population; that is, a population of accounts that had not been delinquent in the specified time period.

In order to identify likely sub-populations within the overall portfolio, the scorecard developer performs a segmentation analysis. Likely splits are:

Time on books	New or old New accounts have been open up to a specified number of months and old accounts have been open longer.
Historical delinq.	Clean/dirty Clean accounts have no history of delinquency over $n$ months and dirty accounts have been delinquent at least once during the $n$ -month period.
Current delinq.	Current/1-cycle delinquent/2-cycles delinquent This split is based on current level of delinquency.

Groups are often combined. For example, an Old Clean Current scorecard would operate on the population that was on the books a specified number of months, was never delinquent during a defined previous period, and was current this month. The general rule for a sub-population is that a group must be large enough to have an acceptable number of goods and bads.

## Developing Characteristics and Attributes

TRIAD calculates raw behavior scores from account characteristics and attributes. Characteristics ask questions about an account, such as: "What is the highest level of delinquency this account has reached in the last six months?" or "What is the ratio of the actual payment to the minimum payment over the last four months?" Attributes provide a series of multiple choice answers to the questions posed by the characteristics. Each attribute has a weight (number of points) associated with the answer. It is the summation of the weights that produces the raw behavior score. The series of characteristic questions comprises the scorecard.

Generating characteristics requires extracting fields from each account record. Typically, a month-end observation file is used to generate characteristics. If scoring occurs at billing, only fields which have remained unchanged between billing and month-end may be used. Some characteristics, such as Highest Lifetime Delinquency, need only a single field from the account record. Others, such as ratios over time, need two or more fields. After characteristics are created, each is evaluated for its ability to separate good and bad accounts in the development database.

Any field used for a characteristic in the development phase must be available after scorecards are implemented. Not only must it be available, but its status must be identical. For example, a cycle-to-date field might contain the full accumulation for the cycle or it may have been initialized back to zero for the new cycle. If the development characteristic used the full cycle amount, the implemented version of the characteristic must be calculated before that amount is reset to zero.

## Producing Preliminary Scorecards

Just as a scorecard is composed of characteristics, so a characteristic can be broken down further into attributes. A number of processes take place before the final set of attributes is determined. The last of the processes is called coarse classing, where very fine level individual attributes are grouped to obtain statistical reliability at the coarse attribute level. Attributes that represent similar risk levels are grouped together. Similar attribute groupings in different characteristics often have very different predictive values. The same characteristic may appear in more than one scorecard, although the attribute weights typically will differ.

In table 5, the characteristic Average Balance Last Six Months, has four attributes. The characteristic, Months Since Delinquency, has five attributes, including Never. With the characteristic Months Since Delinquency the score increases as the time since last delinquency grows. An account that has never been delinquent gets the highest, or best, score.

Some characteristics give a larger range of scores, an indicator that they carry more weight than others. The characteristic Total Payments as a Percent of Total Balance over the Last 6 Months seems to be a weaker indicator than



Months Since Delinquency. However, the characteristics are a better indicator when used together than when used alone.

Table 5: Sample score compiled for a single account.

Characteristic	Attribut/ Weight	Attribute/ Weight	Attribute/ Weight	Attribut/ Weight	Attribute/ Weight	Score
Total Payments as % of Total Balance Last 6 Months	0 - 3 % 60	4 - 8% 74	9 - 12% 81	13 -35% 90	36 - 100% 81	74
Months since Delin- quency	0 - 3 21	4 - 5 54	6 - 9 67	10+ 79	Never 90	79
Purchases this Period as % of Previous Bal- ance	1 - 19 60	20 - 49 67	50 - 89 71	90 - 99 77	100+ 71	77
Average Balance Last Six Months	<\$250 62	\$250 - 499 75	\$500 - 3499 85	\$3500+ 49		85
Percent of Balance that is Cash Advance	0 85	1 - 19 68	20 - 49 50	50+ 43		50
Current Balance as % of Highest Balance	1 - 39 58	40 - 69 65	70 - 79 69	80 - 89 75	90 - 100 71	75
					Total Score	440

The raw score is the sum of the weights of each characteristic in the scorecard. The chart above shows a sample score compiled for an account. In this example, information about the account is translated into a raw score of 440.

Once the preliminary cards are built, you will meet with your Fair, Isaac team during the scorecard delivery meeting to review each step of the process. At that time, you will work with the characteristics and attributes until you are satisfied with each scorecard. Once scorecards are finalized, they are installed in your TRIAD code and tested to assure that they are performing as designed.

## Scorecard Implementation

After the scorecards have been approved, they are implemented into your TRIAD software. The definition of each scorecard and its components are available for review in the Scorecard Manager facility of the Table Maintenance System. Based on contractual agreement, your version of Scorecard Manager may have update capabilities. Please contact your scorecard consultant before making any changes to your scorecards within Scorecard Manager.

At cycle time each account or customer will select the scorecard appropriate for its current condition using the Scorecard Assignment table. The keys to this table are selected during the scorecard design process. You can track a scorecard's performance using the reports described in this chapter.

When you need to align the scores to restore the original odds-to-score relationship, enter the alignment factors in the Scorecard Assignment Table, as described in the *TRIAD Table Maintenance Guide*. Contact your Fair, Isaac representative for assistance with the statistical process of determining your new alignment factors.

## Behavior Score Tally Reports

Behavior score retention and exclusion data is recorded in the Report Record file for each account.

At the end of the month, all the information is tallied and summarized for reporting. Collectively, the Outcomes reports are known as the Cycle Tally reports. TRIAD has four Behavior Score Cycle Tally reports.

- Behavior Score Exclusions by SPID Report
- Behavior Score Distribution by SPID and Scorecard ID
- Behavior Score Distribution by SPID, Delinquency, and Credit Utilization
- Behavior Score Distribution by SPID, Delinquency, and Cash Utilization

Cycle Tally reports are produced once a month, typically at month-end. They can also be produced daily or weekly, if needed. Under normal conditions, monthly reports are sufficient. During the first month of a new strategy, daily or weekly tallies may be useful.

Reports are produced by SPID (strategic portfolio identification number). Each report is produced for each SPID and for the total of all SPIDs. The title of each report contains the first and last date for which data was included.

If you need to see the characteristics and attributes for each account, the system can generate an extra record on the report record file. This record is

called the Behavior Score Test record. It is a valuable test tool. To enable this feature, set the Generate Behavior Score Test Records field in the Client Parameters table. You can set this field to produce Behavior Score Test records for all scorecards or you can turn on production of the Score Test records for individual scorecards via the Scorecard Manager facility of the TRIAD Table Maintenance System. Be sure to disable it in production. This feature is further defined in the *TRIAD Data Processing Guide*.

## Behavior Score Exclusions by SPID

This report displays the number of accounts in the exclusion and retention categories. If you isolate the exclusions in your strategies using the behavior score decision key, you can use this report to determine the number of accounts with each specific exclusion score. All the data is collected at billing.

TRIAD DEMO SYSTEM REPORT ID : TRDC69XP-01-V5.0		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE REPORTING PERIOD - 07/01/1997 THRU 07/29/1997		PAGE NO : 4 RUN DATE : 08/02/1997 RUN TIME : 23:39:26
		BEHAVIOR SCORE EXCLUSIONS BY SPID REPORT		
STRATEGIC PORTFOLIO ID: --		NAME:		ALL
EXCLUSION REASON		# OF ACCOUNTS		
-----		-----		
CHARGEOFF		6,112		
BANKRUPT		679		
LOST		18,963		
STOLEN		2,375		
5+ CYCLES DELINQUENT		1,738		
1ST BILL/NEVER ACTV		150,046		
INACTIVE 13+ MONTHS		37,162		
-----		-----		
TOTAL EXCLUDED		217,075		
RETAINED REASON		# OF ACCOUNTS		
-----		-----		
INACTIVE 7-12 MONTHS		16,019		
-----		-----		
TOTAL RETAINED		16,019		
TOTAL EXCLUDED		217,075		
TOTAL RETAINED		16,019		
NEWLY SCORED		496,818		
-----		-----		
TOTAL		729,912		

Figure 1: Behavior Score Exclusions by SPID report.

## Field Reference

The Behavior Score Exclusion by SPID report heading contains the Strategic Portfolio ID (SPID) and Name. The detail fields are listed below.

Table 6: Fields in the Behavior Score Exclusion by SPID report.

Exclusion Reason	Reason why an account was excluded from scoring.
# of Accounts	Number of accounts that were excluded in each category.
Total Excluded	Total number of accounts excluded in the SPID.
Retained Reason	Reason why an account's prior score was retained and not recalculated.
# of Accounts	Number of accounts with retained scores for each reason.
Total Retained	Total number of accounts whose scores were retained.
Newly Scored	Total number of accounts whose scores were calculated this month.
Total	Total number of accounts in the portfolio that were excluded, retained, or newly scored.

## Behavior Score Distribution By SPID and Scorecard ID

This report displays the behavior score distribution across scorecards. For each scorecard, the report shows the number and the percentage of accounts in each behavior score range. The behavior score ranges are defined in the Report Ranges table of the TRIAD Table Maintenance System. Use this report to verify the score ranges being scored on each scorecard.

### 3: Behavior Scoring

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 14																											
REPORT ID : TRDC6SEP-02-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997				RUN DATE : 08/02/1997																											
								RUN TIME : 23:39:26																											
BEHAVIOR SCORE DISTRIBUTION BY SPID AND SCORECARD ID																																			
STRATEGIC PORTFOLIO ID: --				SCORECARD ID				NAME: ALL																											
								(CONTINUE)																											
001			002			003			004			005			006			007																	
BEHAVIOR	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE	NUMBER	PCT	SCORE														
000-099	7	0.0		1	0.0		376	0.1		78	0.0		34	0.1		15	0.2		5	0.0															
100-199	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
200-299	3	0.0		0	0.0		12	0.0		80	0.1		24	0.0		32	0.4		3	0.0															
300-399	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
400-449	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
450-499	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
500-529	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
530-549	0	0.0		0	0.0		0	0.0		1	0.0		1	0.0		45	0.6		0	0.0															
550-569	0	0.0		0	0.0		1	0.0		17	0.0		234	0.8		807	12.1		0	0.0															
570-589	4	0.0		15	0.8		1	0.0		171	0.2		1,060	4.0		2,384	45.0		0	0.0															
590-609	6	0.0		47	2.5		10	0.0		388	0.7		2,363	8.9		1,391	30.0		3	0.0															
610-619	36	0.2		165	9.1		49	0.0		1,010	1.2		1,899	7.1		284	4.2		12	0.0															
620-629	103	0.6		198	10.9		89	0.0		2,088	2.6		2,913	11.0		293	4.4		39	0.7															
630-639	171	1.0		180	9.9		141	0.0		2,725	3.4		3,982	15.0		173	2.6		61	1.1															
640-649	301	1.8		181	9.9		120	0.0		3,719	4.6		4,417	16.7		3	0.0		111	2.0															
650-654	278	1.7		85	4.6		162	0.0		2,239	2.8		1,984	7.5		1	0.0		80	1.4															
655-659	315	1.9		93	5.1		420	0.1		2,608	3.2		1,061	4.0		0	0.0		106	1.9															
660-664	357	2.2		98	5.4		612	0.2		3,566	4.4		879	3.3		1	0.0		143	2.5															
665-669	358	2.2		84	4.6		722	0.2		3,559	4.4		729	2.7		0	0.0		118	2.1															
670-674	331	2.0		167	9.2		853	0.3		3,941	4.9		553	2.0		1	0.0		118	2.1															
675-679	391	2.4		190	10.4		2,167	0.8		4,438	5.5		1,104	4.1		0	0.0		136	2.4															
680-684	385	2.3		89	4.9		3,841	1.5		4,328	5.4		532	2.0		0	0.0		142	2.5															
685-689	342	2.1		33	1.8		5,328	2.2		3,714	4.6		587	2.2		0	0.0		125	2.2															
690-694	371	2.2		57	3.1		4,726	1.9		3,461	4.3		850	3.2		0	0.0		110	1.9															
695-699	379	2.3		65	3.5		4,371	1.8		3,020	3.8		508	1.9		0	0.0		108	1.9															
700-704	402	2.4		53	2.9		4,532	1.8		3,251	4.0		391	1.4		0	0.0		108	1.9															
705-709	426	2.6		9	0.4		5,514	2.2		3,794	4.7		230	0.9		0	0.0		160	2.9															
710-714	540	3.3		0	0.0		6,061	2.5		4,726	5.9		1	0.0		0	0.0		176	3.1															
715-719	571	3.5		1	0.0		5,705	2.3		5,320	6.6		0	0.0		0	0.0		192	3.4															
720-724	724	4.4		1	0.0		5,498	2.2		6,035	7.5		2	0.0		0	0.0		254	4.6															
725-729	720	4.4		0	0.0		5,818	2.4		6,805	8.5		4	0.0		0	0.0		259	4.7															
730-734	1,282	7.9		0	0.0		9,565	3.9		4,018	5.0		2	0.0		0	0.0		316	5.7															
735-739	1,080	6.5		0	0.0		22,045	9.1		243	0.3		1	0.0		0	0.0		443	8.9															
740-749	2,552	15.7		0	0.0		35,738	14.7		0	0.0		0	0.0		1	0.0		859	15.5															
750-759	2,880	17.7		0	0.0		31,093	12.8		0	0.0		1	0.0		0	0.0		916	16.6															
760-769	890	5.4		0	0.0		43,349	17.9		0	0.0		6	0.0		0	0.0		350	6.7															
770-779	0	0.0		0	0.0		42,859	17.7		0	0.0		7	0.0		0	0.0		316	5.7															
780-789	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
790-799	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
800-999	0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0		0	0.0															
TOTAL																						16,185	3.1	1,812	0.3	241,978	47.1	79,557	15.5	26,395	5.1	6,631	1.2	5,508	1.0

Figure 2: Behavior Score Distribution by SPID and Scorecard ID report

### Field Reference

The Behavior Score Distribution by SPID and Scorecard ID report heading contains the Strategic Portfolio ID (SPID) and Name. The detail fields are listed in table 7 on page 48.

Table 7: Fields in the Behavior Score Distribution by SPID and Scorecard ID report.

Behavior Score	Score ranges for the accounts. Score Ranges are set in the Report Ranges table, as explained in the <i>TRIAD Table Maintenance Guide</i> .
Total (Horizontal)	Total number of accounts that were scored with the scorecard shown at the top of the column.
Scorecard ID	The scorecard used to score the accounts. Numbers that begin with an integer other than zero indicate accounts scored on a specific card, but tracked separately. For example, 801 means the accounts were scored on scorecard 001, but are tracked separately.
Number	Number of accounts in each behavior score range scored using the scorecard.
Pct Col	Percent of total accounts in the column scored with the scorecard.
Continue	Indicates that the report continues on the next page.
Newly Scored	Newly scored accounts are accounts scored this cycle.
Number	Total number of accounts in each behavior score range scored this cycle. Total for newly scored accounts across all behavior score ranges should match the total for newly scored accounts on the Behavior Score Exclusion by SPID report.
Pct Col	Percent of total newly-scored accounts in the column.
Retained	Accounts whose scores are retained from a prior month and not recalculated.
Number	Total number of accounts in each behavior score range whose scores were retained from a previous cycle. Total for retained accounts across all behavior score ranges should match the total for retained accounts on the Behavior Score Exclusion by SPID report.
Pct Col	Percent of total accounts in the column with retained scores.

Table 7: Fields in the Behavior Score Distribution by SPID and Scorecard ID report. (continued)

Total (Vertical)	Total number of accounts scored in each range across all scorecards.
Number	Total number of accounts in each behavior score range.
Pct Col	Percent of total accounts in the column in each behavior score range.
Pct Col	Percent of all accounts in the column.

## Behavior Score Distribution by SPID, Delinquency, and Credit or Cash Utilization

The Behavior Score Distribution reports assist you in monitoring the use of credit and cash lines. Both versions of the report show utilization for current, 1-cycle, 2-cycle, and total being less than 3-cycle accounts only.

The Behavior Score Distribution by SPID, Delinquency, and Cash Utilization report can be suppressed if your company has neither cash balances nor cash lines.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 30			
REPORT ID : TRDC6SKP-03-V5.0		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										RUN DATE : 08/02/1997			
												RUN TIME : 23:39:26			
BEHAVIOR SCORE DISTRIBUTION BY SPID, DELQ AND CREDIT UTILIZATION															
STRATEGIC PORTFOLIO ID: --												NAME: ALL			
DELINQUENCY LEVEL : 1 CYCLE															
CREDIT LINE UTILIZATION %															
BEHAVIOR SCORE	000-000	001-009	010-019	020-029	030-039	040-049	050-059	060-069	070-079	080-089	090-099	100-109	110-119	120-999	TOTAL
000-099	9	24	17	18	16	12	9	7	12	15	26	24	9	3	201
100-199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200-299	0	0	0	0	0	0	1	1	2	2	11	10	2	0	29
300-399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400-449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
450-499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500-529	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
530-549	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
550-569	0	0	0	1	0	0	0	0	1	4	20	177	79	27	309
570-589	1	3	0	2	7	15	28	35	73	166	465	490	124	28	1,137
590-609	6	12	13	18	32	56	75	106	179	415	1,162	892	164	21	3,151
610-619	6	21	9	19	32	44	50	78	150	281	890	973	130	16	2,699
620-629	16	31	21	25	32	63	65	97	155	355	1,217	1,730	328	23	4,158
630-639	32	51	21	31	57	84	117	181	293	623	2,071	1,718	311	27	5,617
640-649	35	83	51	59	124	167	240	323	478	862	2,623	985	126	10	6,166
650-654	30	51	37	63	81	128	157	227	221	443	1,087	221	15	5	2,766
655-659	30	56	66	59	96	115	114	122	135	207	426	85	6	3	1,520
660-664	32	67	59	102	99	91	84	103	109	167	343	64	5	0	1,325
665-669	101	219	119	115	119	86	73	54	64	59	49	16	3	2	1,079
670-674	113	283	172	124	72	49	39	31	15	12	36	12	1	0	959
675-679	312	609	280	187	104	67	52	37	24	24	34	11	3	0	1,744
680-684	101	311	156	100	64	41	21	23	16	9	13	2	0	0	857
685-689	145	327	152	84	43	38	18	8	8	3	2	2	1	0	831
690-694	186	523	230	110	61	30	22	9	7	4	5	4	0	0	1,191
695-699	170	319	145	65	26	12	13	6	7	4	1	0	0	0	768
700-704	48	260	125	77	39	25	9	3	7	3	3	2	2	0	603
705-709	28	151	66	38	21	13	4	6	2	2	1	4	0	0	336
710-714	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
715-719	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
720-724	0	1	1	0	0	0	0	0	0	0	0	0	1	0	3
725-729	0	0	1	0	0	0	0	1	0	0	0	2	0	0	4
730-734	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
735-739	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
740-749	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
750-759	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
760-769	0	0	1	2	1	2	0	1	0	0	0	1	0	0	8
770-779	0	2	0	3	1	0	2	1	1	0	0	0	0	0	10
780-789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
790-799	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800-999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1401	3,405	1,742	1,302	1,128	1,138	1,193	1,461	1,959	3,662	10,486	7,427	1,312	166	37,782

Figure 3: Behavior Score Distribution by SPID, Delinquency, and Credit Utilization report



TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 38			
REPORT ID : TRDC682P-04-VS.0		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										RUN DATE : 08/02/1997			
												RUN TIME : 23:39:26			
BEHAVIOR SCORE DISTRIBUTION BY SPID, DELINQUENCY AND CASH UTILIZATION															
STRATEGIC PORTFOLIO ID: --												NAME: ALL			
DELINQUENCY LEVEL : 1 CYCLE															
BEHAVIOR ----- CASH LINK UTILIZATION %-----															
SCORE	000-000	001-009	010-019	020-029	030-039	040-049	050-059	060-069	070-079	080-089	090-099	100-109	105-109	110-999	TOTAL
000-099	26	0	0	1	2	1	2	0	1	0	0	0	1	4	38
100-199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200-299	3	0	2	0	0	0	0	0	0	0	1	0	0	2	8
300-399	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
400-449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
450-499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500-529	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
530-549	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
550-569	4	1	1	3	5	7	4	5	5	5	3	4	0	25	72
570-589	65	8	17	16	19	10	20	24	27	22	22	13	10	65	338
590-609	130	23	50	39	46	37	34	42	43	44	43	20	19	123	693
610-619	199	9	21	21	19	27	29	23	36	24	42	13	22	110	595
620-629	169	27	53	54	55	69	61	46	56	65	59	29	26	175	944
630-639	377	47	83	51	59	74	61	79	69	80	56	21	19	175	1,231
640-649	505	75	91	89	71	70	70	61	73	58	46	27	21	115	1,372
655-659	236	19	13	10	11	3	3	2	3	4	1	2	1	6	314
660-664	239	27	13	4	3	6	3	0	1	0	0	2	0	1	299
665-669	210	13	9	8	6	2	2	1	1	3	2	0	0	2	259
670-674	207	6	0	1	0	0	1	0	0	0	0	0	0	1	216
675-679	369	7	5	1	0	0	0	0	0	0	0	0	0	0	382
680-684	161	3	4	1	2	0	1	1	0	0	1	0	0	0	174
685-689	167	1	1	0	0	0	0	1	0	1	0	0	0	0	171
690-694	253	0	0	0	0	0	0	0	0	0	0	0	0	0	253
695-699	182	0	0	0	0	0	0	0	0	0	0	0	0	0	182
700-704	127	0	0	0	0	0	0	0	0	0	0	0	0	0	127
705-709	75	0	0	0	0	0	0	0	0	1	0	0	0	0	76
710-714	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
715-719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
720-724	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
725-729	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
730-734	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
735-739	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
740-749	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
750-759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
760-769	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
770-779	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
780-789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
790-799	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
800-999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4,084	308	399	332	320	326	303	298	321	294	280	133	121	817	8,336

Figure 4: Behavior Score Distribution by SPID, Delinquency, and Cash Utilization report

### Field Reference

The Behavior Score Distribution by SPID, Delinquency, and Credit Utilization and Behavior Score Distribution by SPID, Delinquency, and Cash Utilization report headings contain: Strategic Portfolio ID, Name and Delinquency Level. The delinquency levels are reported as of cycle. The report only focuses on current, 1-cycle, and 2-cycle accounts.

The detail fields are listed table 8 on page 52.

Table 8: Fields in the Behavior Score Distribution by SPID, Delinquency, and Credit/Cash Utilization reports.

Behavior Score	Score ranges. Score ranges for the rows are set in the Report Ranges table of the TRIAD Table Maintenance System.
Total (Horizontal)	Total number of accounts in each percentage range of credit or cash line utilization.
Credit or Cash Line Utilization % nnn - nnn	Each cell represents a tally of accounts described by a behavior score range and utilization range. Column headed 000 - 000 is a special case. The accounts in that column had either a zero balance or a credit balance when the account cycled. Both credit and cash line utilization ranges for the columns are set in the Report Ranges table of the TRIAD Table Maintenance System. Cash Line ranges may differ from Credit Line ranges.
Total (Vertical)	Total number of accounts in each behavior score range.

## Scorecard Performance Reports

The Scorecard Performance reports provide information about the predictive ability and the performance of the scorecards for an indicated period.

Although there are differences among the reports, their purposes are similar; the reports allow you to assess if the scorecards are performing according to their design specifications. They do this in two ways:

- They provide you a view of performance. If the scorecard is performing well, a high score range shows a greater number of accounts that remain current and a lower number of accounts that reached an advanced stage of delinquency. The lower ranges will show the opposite.
- The reports furnish the number of goods and bads associated with each score range. From these numbers, you can calculate the odds and assess the performance of the scorecard relative to its design specifications. For example, if the odds-to-score ratio was designed to be 60-to-1 at a score of 600, a quick calculation of the odds for that score range provides a very rough scorecard performance check.

If an account fits in two categories on the report, it is reported in the more severe of the categories. For example, if the categories are 4+ cycles delinquent and bankrupt, the account is reported bankrupt.

If the scorecards were developed by Fair, Isaac, specific information on the original scorecard calculations are included in the *Technical Review* that came with the scorecards.

Each report spans a performance period associated with a scorecard ending in the current month. The interval is defined in the report headings. Generally, a window of six to twelve months is set during the TRIAD design meeting. The reporting interval is identical to the performance interval except immediately after the system is implemented. For example, if the performance period is six months, it takes six months to accumulate performance data. During that period, the reports assess performance over the available period. Reports produced during the first month are not robust, since there is not an interval against which to measure performance.

Reports are produced monthly. For each account, performance information is collected on the day the account cycles. The information is then processed for the interval period when the month-end reports are run. Only accounts scored at the beginning of the performance period are included in the Scorecard Performance reports.

The first three reports use the same reporting matrix. They are described in the next section. The fourth report, which is different from the first three, is described at the end of the chapter.

## Performance by Score Reports

The Performance by Score Reports include:

- Behavior Score by SPID and Scorecard ID
- Raw Score by SPID and Scorecard ID
- Credit Bureau Score by SPID.

Each report shows a slightly different version of scorecard performance. The Behavior Score by SPID and Scorecard ID report shows the maximum level of delinquency reached by accounts in each aligned behavior score range during the performance period. The Raw Score by SPID and Scorecard ID report gives the same information by raw behavior score range. Before the scorecards are re-aligned, the numbers on these two reports will be identical. The third report, Credit Bureau Score by SPID, uses the same delinquency matrix, but shows the data by credit bureau score range.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 28						
REPORT ID : TRDC66PP-01-V5.0		SCORECARD PERFORMANCE REPORT				RUN DATE : 08/02/1997						
		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997				RUN TIME : 23:40:15						
BEHAVIOR SCORE BY SPID AND SCORECARD ID												
STRATEGIC PORTFOLIO ID : --		SPID NAME :		ALL								
SCORECARD ID : --		SCORECARD NAME :		ALL								
BEHAVIOR SCORE AS OF 01/1997 ( 06 MONTHS AGO )												
BEHAVIOR TOTAL <-----> MAXIMUM DELINQUENCY IN 02/1997 - 07/1997												
SCORE	ACCOUNTS	CURRENT	1	2	3	4	5	6	7	8	9	10
000-099	223,154	207,418	99	43	2,693	3,735	679	8,487	207,517	13,646		
100-199	0	0	0	0	0	0	0	0	0	0		
200-299	197	20	2	115	46	14	0	0	22	60		
300-399	0	0	0	0	0	0	0	0	0	0		
400-449	0	0	0	0	0	0	0	0	0	0		
450-499	0	0	0	0	0	0	0	0	0	0		
500-529	0	0	0	0	0	0	0	0	0	0		
530-549	62	0	0	4	2	56	0	0	0	58		
550-569	1,407	1	4	526	421	455	0	0	5	876		
570-589	5,636	3	190	3,800	1,099	544	0	0	193	1,643		
590-609	6,524	21	639	4,758	633	473	0	0	660	1,106		
610-619	4,576	104	1,313	2,640	277	242	0	0	1,417	517		
620-629	7,626	215	3,501	3,279	394	237	0	0	3,716	629		
630-639	9,896	463	6,212	2,667	350	204	0	0	6,675	554		
640-649	11,648	1,153	8,657	1,463	240	135	0	0	9,810	369		
650-654	6,307	1,045	4,622	517	80	43	0	0	5,667	115		
655-659	5,973	1,776	3,626	451	73	47	0	0	5,402	102		
660-664	7,382	2,500	4,338	406	81	57	0	0	6,838	106		
665-669	7,291	2,642	3,924	396	70	59	0	0	6,766	96		
670-674	7,807	3,429	3,882	368	62	66	0	0	7,311	85		
675-679	11,096	5,634	4,829	341	62	30	0	0	10,663	83		
680-684	12,309	8,358	3,649	264	32	6	0	0	12,007	34		
685-689	13,854	10,431	3,112	278	22	11	0	0	13,543	28		
690-694	12,657	9,133	3,343	169	11	1	0	0	12,476	11		
695-699	11,296	8,484	2,730	81	1	0	0	0	11,214	1		
700-704	11,698	8,915	2,746	37	0	0	0	0	11,611	0		
705-709	13,593	11,039	2,550	3	1	0	0	0	13,589	1		
710-714	15,418	12,825	2,593	7	1	0	0	0	15,410	0		
715-719	15,747	12,551	3,192	4	0	0	0	0	15,743	0		
720-724	16,522	12,838	3,681	2	1	0	0	0	16,519	1		
725-729	16,155	13,916	4,238	1	0	0	0	0	16,154	0		
730-734	21,901	19,596	2,302	3	0	0	0	0	21,898	0		
735-739	38,078	37,838	238	2	0	0	0	0	38,076	0		
740-749	55,403	55,192	208	3	0	0	0	0	55,400	0		
750-759	45,154	45,127	27	0	0	0	0	0	45,154	0		
760-769	58,846	58,838	8	0	0	0	0	0	58,846	0		
770-779	57,268	57,258	10	0	0	0	0	0	57,268	0		
780-789	0	0	0	0	0	0	0	0	0	0		
790-799	0	0	0	0	0	0	0	0	0	0		
800-999	0	0	0	0	0	0	0	0	0	0		
TOTAL	734,481	609,163	80,457	22,628	6,652	6,415	679	8,487	609,620	20,121		

Figure 5: Behavior Score by SPID and Scorecard ID report

### 3: Behavior Scoring

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 1	
REPORT ID : TRDC6SPF-02-V5.0		SCORECARD PERFORMANCE REPORT				RUN DATE : 06/02/1997	
		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997				RUN TIME : 23:40:13	
RAW SCORE BY SPID AND SCORECARD ID							
STRATEGIC PORTFOLIO ID : --		SPID NAME : ALL					
SCORECARD ID: 0001		SCORECARD NAME : NEW CURRENT					
RAW SCORE AS OF 01/1997 ( 06 MONTHS AGO )							
RAW	TOTAL	MAXIMUM DELINQUENCY IN 02/1997 - 07/1997					
SCORE	ACCOUNT#	CURRENT	1 CYCLE	2 CYCLE	3 CYCLE	4+ CYCLE	BANKRUPT
000-099	21,085	19,620	13	5	232	383	52
100-199	0	0	0	0	0	0	0
200-299	18	0	1	12	5	0	0
300-399	0	0	0	0	0	0	0
400-449	0	0	0	0	0	0	0
450-499	0	0	0	0	0	0	0
500-529	0	0	0	0	0	0	0
530-549	6	0	0	0	0	6	0
550-569	137	0	0	57	46	34	0
570-589	475	0	19	313	97	46	0
590-609	615	3	65	456	48	43	0
610-619	405	0	118	230	32	17	0
620-629	768	22	341	341	40	24	0
630-639	967	41	619	268	27	12	0
640-649	1,063	103	797	126	25	12	0
650-654	589	110	416	54	4	3	0
655-659	585	171	359	46	6	3	0
660-664	751	261	437	43	4	6	0
665-669	673	270	356	38	4	5	0
670-674	724	298	376	36	6	8	0
675-679	1,033	555	436	35	4	3	0
680-684	1,196	612	347	33	3	1	0
685-689	1,301	1,000	275	26	0	0	0
690-694	1,236	883	339	14	0	0	0
695-699	1,088	822	260	6	0	0	0
700-704	1,082	818	262	2	0	0	0
705-709	1,264	1,025	239	0	0	0	0
710-714	1,462	1,215	446	1	0	0	0
715-719	1,505	1,214	291	0	0	0	0
720-724	1,608	1,263	345	0	0	0	0
725-729	1,671	1,274	397	0	0	0	0
730-734	2,125	1,911	214	0	0	0	0
735-739	3,521	3,500	21	0	0	0	0
740-749	5,377	5,354	22	1	0	0	0
750-759	4,378	4,372	6	0	0	0	0
760-769	5,623	5,623	0	0	0	0	0
770-779	5,405	5,405	0	0	0	0	0
780-789	0	0	0	0	0	0	0
790-799	0	0	0	0	0	0	0
800-999	0	0	0	0	0	0	0
TOTAL	69,736	57,953	7,617	2,143	583	608	52
							780
							65,570
							1,014

Figure 6: Raw Score by SPID and Scorecard ID report

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE						PAGE NO : 60			
REPORT ID : TRDCGPP-03-V3.0		CREDIT BUREAU SCORE PERFORMANCE REPORT						RUN DATE : 08/02/1997			
		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997						RUN TIME : 23:40:15			
CREDIT BUREAU SCORE BY SPID											
STRATEGIC PORTFOLIO ID : --						SPID NAME :		ALL			
CREDIT BUREAU SCORE AS OF 01/1997 ( 06 MONTHS AGO )											
CREDIT BUREAU TOTAL <----- MAXIMUM DELINQUENCY IN 02/1997 - 07/1997 ----->											
SCORE	ACCOUNTS	CURRENT	1 CYCLE	2 CYCLE	3 CYCLE	4+ CYCLE	BAKRUPT	OTHER C/O	BNVR GOOD	BNVR BAD	
000-399	223,351	207,438	101	158	2,739	3,749	679	8,487	207,539	13,706	
400-409	0	0	0	0	0	0	0	0	0	0	
410-419	0	0	0	0	0	0	0	0	0	0	
420-429	0	0	0	0	0	0	0	0	0	0	
430-439	0	0	0	0	0	0	0	0	0	0	
440-449	2	0	0	0	0	0	0	0	0	2	
450-459	26	0	0	9	7	10	0	0	0	17	
460-469	85	0	0	26	25	34	0	0	0	59	
470-479	232	0	2	108	64	58	0	0	2	122	
480-489	525	0	7	278	124	116	0	0	7	240	
490-499	858	0	29	539	165	125	0	0	29	290	
500-509	1,226	3	50	825	204	144	0	0	53	348	
510-519	1,504	9	137	974	220	164	0	0	146	384	
520-529	2,130	16	357	1,315	263	179	0	0	373	441	
530-539	3,000	49	839	1,641	274	197	0	0	888	471	
540-549	4,212	123	1,651	1,873	350	215	0	0	1,774	564	
550-559	5,263	309	2,419	1,932	369	234	0	0	2,728	600	
560-569	6,509	712	3,201	2,024	371	201	0	0	3,913	568	
570-579	7,861	1,318	4,031	2,012	296	204	0	0	5,349	488	
580-589	9,826	2,702	4,829	1,860	456	179	0	0	7,531	417	
590-599	12,271	4,764	5,447	1,698	199	163	0	0	10,211	345	
600-609	14,112	6,397	6,030	1,384	189	112	0	0	12,427	279	
610-619	16,491	8,710	6,486	1,234	161	100	0	0	15,196	243	
620-629	19,592	11,322	7,070	966	147	87	0	0	18,392	210	
630-639	22,192	14,296	7,136	615	88	57	0	0	21,432	132	
640-649	28,322	21,408	6,375	437	63	39	0	0	27,783	86	
650-659	31,457	25,496	5,628	274	37	22	0	0	31,124	47	
660-669	35,141	30,063	4,794	240	23	13	0	0	34,857	30	
670-679	39,737	35,690	3,898	120	11	10	0	0	39,588	16	
680-689	40,485	37,279	3,155	44	6	1	0	0	40,434	7	
690-699	30,419	35,825	2,574	19	1	0	0	0	38,399	1	
700-709	36,047	34,104	1,939	4	0	0	0	0	36,043	0	
710-719	33,113	31,696	1,414	3	0	0	0	0	33,110	0	
720-729	29,539	28,827	712	0	0	0	0	0	29,539	0	
730-739	25,677	25,551	126	0	0	0	0	0	25,677	0	
740-749	18,486	18,470	16	0	0	0	0	0	18,486	0	
750-759	14,190	14,190	0	0	0	0	0	0	14,190	0	
760-769	9,363	9,362	1	0	0	0	0	0	9,363	0	
770-799	3,037	3,034	3	0	0	0	0	0	3,037	0	
800-999	0	0	0	0	0	0	0	0	0	0	
TOTAL	734,481	609,163	80,457	22,628	6,652	6,415	679	8,487	689,620	20,121	

Figure 7: Credit Bureau Score by SPID report

## Field Reference

The headings on the first three reports are very similar. The only difference is the Credit Bureau Score by SPID report does not have Scorecard ID information. Otherwise, the fields are the same, Strategic Portfolio ID and Name.

The row headings differ by report:

- Aligned behavior score ranges for the Behavior Score version of the report.
- Raw score ranges for the raw score version of the report.
- Credit bureau score ranges for the credit bureau version of the report.

The last row contains totals for each category.

Score ranges are set in the Report Ranges table of the TRIAD Table Maintenance.

nance System. The same ranges are used for aligned and raw scores. The column headings are listed in table 9.

Table 9: Fields in the Behavior Score by SPID and Scorecard ID, Raw Score by SPID and Scorecard ID, and Credit Bureau Score by SPID reports.

Total Accounts	Total number of accounts in each score range.
Maximum Delinquency in MMYYYY - MMYYYY	Heading for the maximum delinquency level that the accounts reached during the interval period indicated. Each account is recorded only once, at its maximum level of delinquency for the period. The delinquency levels are:
Current	Number of accounts in each range that remained current during the performance interval.
1-cycle	Number of accounts whose highest delinquency was 1-cycle.
2-cycle	Number of accounts whose highest delinquency was 2-cycles.
3-cycle	Number of accounts whose highest delinquency was 3-cycles.
4+cycle	Number of accounts whose highest delinquency was 4 or more-cycles.
Bankrupt	Number of accounts that went bankrupt.
Other C/O	Number of accounts in each range that were charged off for some reason other than bankruptcy.
Bhvr Goods	Total number of accounts in each range classified good during the performance period. Good accounts for your installation are defined in the <i>TRIAD Project Guide</i> .
Bhvr Bads	Total number of accounts in each range that were classified bad during the performance period. Bad accounts for your installation are defined in the <i>TRIAD Project Guide</i> .

*Note: Goods + Bads do not add up to Total Accounts. The difference is Indeterminates. Space constraints do not allow a column for Indeterminates.*

## Behavior Score by Credit Bureau Score by SPID

This report shows account status by behavior score compared to credit bureau score for each SPID. The matrix cells report for the combination of behavior score and credit bureau score nn months ago. The information includes counts of the number of goods and bads in each cell, as well as the odds and population percentage. The definition of goods and bads is taken from the performance definitions shown in the chapter *Behavior Scoring* in the *TRIAD Project Guide*.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE								PAGE NO : 67			
REPORT ID : TRDC6SPF-04-V5.0		BEHAVIOR SCORE BY CREDIT BUREAU SCORE REPORT								RUN DATE : 08/26/1997			
		REPORTING PERIOD - 07/31/1997 THRU 07/31/1997								RUN TIME : 23:40:15			
BEHAVIOR SCORE BY CREDIT BUREAU SCORE BY SPID													
STRATEGIC PORTFOLIO ID : --												SPID NAME : ALL	
CB & BEHAVIOR SCORE AS OF 01/1997 ( 06 MONTHS AGO )													
----->													
BEHAVIOR	000-399	400-449	450-499	500-549	550-619	620-689	690-759	760-829	830-999	TOTAL			
-----													
000-399													
\$ACCTS	223,351	0	0	0	0	0	0	0	0	223,351			
\$GOOD	207,539	0	0	0	0	0	0	0	0	207,539			
\$BAD	13,706	0	0	0	0	0	0	0	0	13,706			
ODDS	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1			
\$BKRPY	679	0	0	0	0	0	0	0	0	679			
\$CHGOFF	8,487	0	0	0	0	0	0	0	0	8,487			
%POP	30.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.41			
400-449													
\$ACCTS	0	0	0	0	0	0	0	0	0	0			
\$GOOD	0	0	0	0	0	0	0	0	0	0			
\$BAD	0	0	0	0	0	0	0	0	0	0			
ODDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
\$BKRPY	0	0	0	0	0	0	0	0	0	0			
\$CHGOFF	0	0	0	0	0	0	0	0	0	0			
%POP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
450-499													
\$ACCTS	0	0	0	0	0	0	0	0	0	0			
\$GOOD	0	0	0	0	0	0	0	0	0	0			
\$BAD	0	0	0	0	0	0	0	0	0	0			
ODDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
\$BKRPY	0	0	0	0	0	0	0	0	0	0			
\$CHGOFF	0	0	0	0	0	0	0	0	0	0			
%POP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
500-549													
\$ACCTS	0	2	37	23	0	0	0	0	0	62			
\$GOOD	0	0	0	0	0	0	0	0	0	0			
\$BAD	0	2	36	20	0	0	0	0	0	58			
ODDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
\$BKRPY	0	0	0	0	0	0	0	0	0	0			
\$CHGOFF	0	0	0	0	0	0	0	0	0	0			
%POP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
550-619													
\$ACCTS	0	0	1,689	8,192	8,262	0	0	0	0	18,143			
\$GOOD	0	0	38	920	1,317	0	0	0	0	2,275			
\$BAD	0	0	692	1,936	1,514	0	0	0	0	4,142			
ODDS	0.0	0.0	0.1	0.5	0.9	0.0	0.0	0.0	0.0	0.5			
\$BKRPY	0	0	0	0	0	0	0	0	0	0			
\$CHGOFF	0	0	0	0	0	0	0	0	0	0			
%POP	0.00	0.00	0.23	1.12	1.12	0.00	0.00	0.00	0.00	2.47			

Figure 8: Behavior Score by Credit Bureau Score by SPID report



## Field Reference

The heading for the report contains the Strategic Portfolio ID, Name, and the as-of date. The date is the month and year the credit bureau and behavior scores were assigned to the accounts. The length of the performance period reporting interval is shown in parentheses. The column and primary row headings are score ranges set in the Report Ranges table of the TRIAD Table Maintenance System. The row sub-headings are explained in table 10.

Table 10: Fields in the Behavior Score by Credit Bureau Score by SPID report.

nn- nnn	The behavior score range in the cell.
#Accts	Total number of accounts in the cell. The good and bad accounts do not equal the total number of accounts because the total includes indeterminate accounts, those that do not fit the definition of good or bad.
#Good	Number of accounts identified as good in the cell. See the <i>TRIAD Project Guide</i> for a definition of good accounts at your installation.
#Bad	Number of accounts identified as bad in the cell. See the <i>TRIAD Project Guide</i> for a definition of bad accounts at your installation.
Odds	Good/bad odds for the accounts in the cell.
#Bkrpt	Number of bankrupt accounts in the cell.
#Chgoff	Number of charged-off accounts in the cell.
%Pop	Percentage of the population (number of accounts in behavior score range for each credit bureau score range/total number of accounts).
Total (Not shown)	Total number of accounts in each column.
Credit Bureau Score	Credit bureau score ranges for each cell.
Total (Vertical)	Total number of accounts in each column.



## 4: Strategy Development

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### About Strategy Development

This chapter examines strategy development, from creating the basic components to evaluating them. Strategy development is an on-going process in which today's aggressive Challenger becomes tomorrow's Champion. This chapter explains:

- Strategy tables and trees
- The elements of a strategy
- Champion/Challenger strategies
- Strategy evaluation tools

### Strategy Tables and Trees

Strategy trees have their own terminology as illustrated in table 1 and in figure 1 on page 62 and figure 2 on page 62.

Table 1: Strategy tree terminology.

Branch	A vertical pathway from the top node of the tree to the resulting scenario.
Level	A horizontal row of a strategy tree. Each level is divided into multiple nodes which reflect the values for one strategy key.
Node	A split on the horizontal plane of a strategy tree, creating one or more new branches. Each box on a horizontal plane represents a node of the strategy tree. For example, the strategy key, % Credit Line Utilized, has three nodes. Each node contains the lower-bound value of the strategy key range.
Strategy Keys	Criteria that define the values at each horizontal level of the tree.
Scenario ID	A number that identifies a set of actions to be taken on an account. The scenario ID appears at the bottom of a branch.

For more information on strategy terms, see the *TRIAD Table Maintenance Guide*.

## How Strategies are Represented

The TRIAD Table Maintenance System provides two ways of working with a strategy: table format and tree format. The system handles conversions from one format to the other automatically. Figures 1 and 2 show views of a simple Delinquent Collections strategy in table and tree format.

SEEN ID	CYCLES DELQ	EVER PAID	TIME ON BOOKS	%CREDIT LINE UTIL	BALANCE	BEHAVIOR SCORE	BAL AT RISK	CD SCORE
001	000000	"N"	000000	000000	-999999	000000	000000	000000
004	000001	"R"	000000	000000	-999999	000000	000000	000000
005	000001	"Y"	000000	000000	-999999	000000	000000	000000
003	000001	"Y"	000000	000000	-999999	000000	000000	000000
006	000001	"Y"	000001	000000	-999999	000000	000000	000000
007	000002	"N"	000000	000000	-999999	000000	000000	000000

Figure 1: The Delinquent Collections Strategy table.

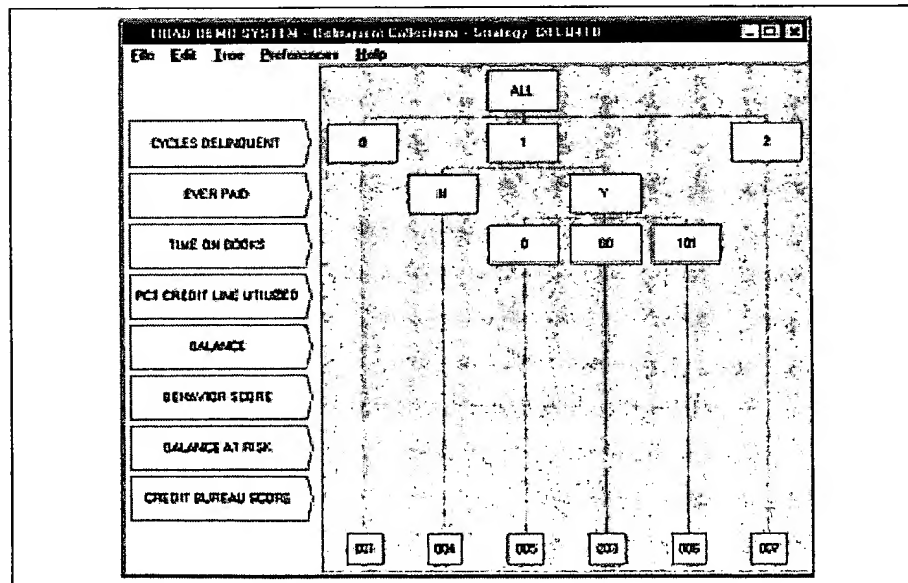


Figure 2: The Delinquent Collections Strategy tree.

## Table to Tree

Each branch of the strategy tree is also a row of a strategy table. The strategy table and its corresponding tree (see figure 1 on page 62 and figure 2 on page 62) are explained below.

Table 2: Relationship of tree branch to table row.

Tree: First Branch Table: First Row	The first branch segregates accounts that are not delinquent. This is the lowest-bound row of the table. When you create a table, the system automatically fills the line with zeros or the lowest value of all keys. The lowest value for each of your keys is specified in your <i>TRIAD Project Guide</i> .
Tree: Second Branch Table: Second Row	Accounts in this branch are 1-cycle delinquent and have defaulted on their first payment. This level introduces the Ever Paid key. Accounts whose Ever Paid key has a value of "N" defaulted on their first payment.
Tree: Third Branch Table: Third Row	Accounts in the third branch are 1-cycle delinquent, have not defaulted on their first payment, and have used between 0 and 79% of their credit line. This level introduces the %Credit Line Utilized key. For this key, you could elect to use a newly calculated credit line from the Credit Line Management decision area.
Tree: Fourth Branch Table: Fourth Row	Accounts in the fourth branch are 1-cycle delinquent, have not defaulted on their first payment, and have used between 80% and 100% of their credit line.
Tree: Fifth Branch Table: Fifth Row	Accounts in the fifth branch are 1-cycle delinquent, have not defaulted on their first payment, and have used in excess of 100% of their credit line.
Tree: Last Branch Table: Last Row	Accounts in the sixth branch are 2-cycles delinquent. They do not use any of the other keys.

The Scenario ID is positioned differently on tables and trees. In trees, the Scenario ID is at the bottom of the branch and in tables it is the first element in the row.

The process of building a strategy table is discussed in the *TRIAD Table Maintenance Guide*

## Elements of a Strategy

Every strategy, regardless of decision area, has the same basic elements:

- Trigger or timing events initiate action in the decision area.
- Strategy keys, also known as decision keys, define an account profile.
- Strategy definitions provide values for each of the strategy keys. This is the strategy design process.
- Scenarios define the actions to be taken for each account profile.
- Strategy IDs link a set of strategy keys to a strategy table and the strategy table to a specific group of accounts, the Champion or Challenger.

### Strategy Element One: Triggers

Triggers are circumstances that alert TRIAD to the need for a review and, potentially, an action in a decision area. In some decision areas, such as Credit Line, the decision is based on timing criteria. In other areas, such as Delinquent Collections, account status initiates the review process, but scenario timing parameters control when actions are taken. In other areas, such as Marketing Communications and Performance-based Pricing, the triggers are a series of filtering tests that determine which accounts will be reviewed for treatment.

### Account Status

In some decision areas, account status is an initial trigger for review. Overlimit Collections, Delinquent Collections, and Authorizations pre-screen accounts by status.

- In the Overlimit Collections decision area, accounts are typically both overlimit and non-delinquent.
- In the Delinquent Collections decision area, the account must be delinquent.
- In the Authorizations decision area, accounts are typically overlimit or mildly delinquent.

In each case, an account status check precedes the initial review in the decision area.

Account status triggers do not initiate an action; they merely pass accounts into a decision area for further review.

## Timing Triggers

Overlimit Breakpoints are a good example of timing triggers. Amount Breakpoint and % Utilization, shown in figure 3, are two types of overlimit breakpoints.

The screenshot shows a software window titled "Overlimit Parameters". Inside, there's a field for "Environment Name" set to "TEST". Below that, "Strategy ID" is "100" and "Overlimit Strategy" is "100". A "Show" button is next to it. The main section is titled "Overlimit Triggers" and contains two sub-sections: "Amount Breakpoint" with a value of "0000100", and "% Utilization Breakpoints" which is a table with four columns labeled -1-, -2-, -3-, and -4-. The values in these columns are 105, 110, 110, and 110 respectively.

Overlimit Parameters									
Environment Name: TEST									
Strategy ID: 100	Overlimit Strategy: 100 [Show]								
Overlimit Triggers									
Amount Breakpoint	% Utilization Breakpoints:								
0000100	<table border="1"> <thead> <tr> <th>-1-</th> <th>-2-</th> <th>-3-</th> <th>-4-</th> </tr> </thead> <tbody> <tr> <td>105</td> <td>110</td> <td>110</td> <td>110</td> </tr> </tbody> </table>	-1-	-2-	-3-	-4-	105	110	110	110
-1-	-2-	-3-	-4-						
105	110	110	110						

Figure 3: Overlimit Breakpoints in the Overlimit Parameters table.

The second % Utilization Overlimit Breakpoint in figure 3 is set to 110. This means that the before posting balance (pre-post balance) must be less than 110% of the credit limit and the balance after posting must be equal to or greater than 110% of the credit limit. When an account in the strategy fits this description, it has crossed a breakpoint. Only when one of the breakpoints is crossed will TRIAD take an overlimit action. For more information on Overlimit Breakpoints, see the chapter *Overlimit Collections*.

## Scenario Triggers

Not all treatments are based on timing alone. In some decision areas, special triggers are built into the scenarios. For example, in Delinquent Collections, the Action/Day fields trigger the corresponding treatments, as seen in figure 4.

Stop/Des Date Actions		Posting Actions			
Start Message	Statement	Day	Collection Frequency	Block Code	Letter
232		05	A	B	D51
		10	A	B	D24
		20	A	D	D20

Figure 4: The Action/Day field in the Delinquent Scenario table.

Delinquent Collections scenarios have three action sets. To create the scenario, define when each action set occurs, relative to cycle. In the preceding figure, actions occur five days, ten days, and twenty days after cycle.

## Filtering Triggers

Marketing Communications and Performance-based use filtering triggers to choose which accounts should be reviewed. The test structure is developed at the TRIAD design meetings. Within the structure, specify the range of values for fields being tested and if the trigger is required, optional, or not used.

## Strategy Element Two: Strategy Keys

Strategy keys are the building blocks of strategies. They are characteristics that define accounts and sort them into different treatment groups. You can select up to fifteen keys from the strategy key library which is created during the TRIAD design meeting. Also, every strategy can have its own unique set of keys or it can copy keys from an existing strategy. Because of this flexibility, strategy keys are also called flexible strategy keys.

Each potential key is coded for use in the appropriate decision areas. Some keys, such as Cycles Delinquent, pertain to several decision areas. Others, like Reissue Review Index, apply only to one, in this case, Reissue. When you build a new set of keys for a strategy, only the keys coded for the decision area appear as choices in the Table Maintenance System.

For more information about building sets of strategy keys, see the *TRIAD Maintenance Guide* or ask your TRIAD strategy consultant. For information about what keys to use in each decision area, see the decision area chapters in this manual and call your TRIAD strategy consultant.



## Strategy Element Three: Designing Strategies

Designing a strategy is part art and part science. On a very simple level, it is the process of assigning value ranges to the strategy keys. The values can be in table or tree format. As we saw in the first section of this chapter, each cell in a strategy table translates to a node on the strategy tree. Work with your strategy consultant when selecting your node values and enhancing your strategy trees.

One of the first rules of building a strategy is arranging the keys so that those with fewer splits or nodes, are at the top; those with many splits are at the bottom.

### Designing the Pseudo-Champion

When you first start using TRIAD, your strategy consultant will work closely with you to determine the right keys and values for your strategies. The first strategies you build may mimic your existing decision tables. In each of the business areas, you do this by using a combination of exclusions, triggers, strategy keys, and actions. These are your pseudo-champion strategies. The pseudo-champion provides a starting point for developing new strategies.

### Designing the Challenger

Next, you create variations to improve the strategies, such as risk-based acceleration/deceleration of delinquent accounts. Together, you and your Fair, Isaac strategy consultant evaluate the results of the strategies over time. The results of that evaluation set the stage for your next set of Challenger strategies. The process then begins again. When the Challenger outperforms the Champion, it is applied to a larger percentage of the portfolio and the Challenger becomes the Champion.

## Strategy Element Four: Scenarios

An action or group of actions applied to an account is called a scenario. The profile of the account or transaction receiving the scenario actions is defined by a horizontal row of a strategy table or a branch of a strategy tree. The actions reside in decision area tables. A scenario ID identifies each unique action or group of actions.

### Examples

Some decision areas have fixed actions from which to choose. In other decision areas, the user defines all or part of the actions. The table below summarizes the actions for each decision area. Of course, TRIAD can be customized to offer user-defined actions in any decision area. Up to 999 scenarios are available in all decision areas.

## Delinquent Collections

Delinquent Collections scenarios can be phased to take actions three times throughout the cycle. Delinquent Collections actions are:

- Printing a statement message (cycle only)
- Including a statement insert (cycle only)
- Sending a letter
- Sending the account to a collections queue
- Setting a block code

## Overlimit Collections

Overlimit Collections scenario actions are triggered by crossing a breakpoint. Overlimit Collections actions are:

- Printing a statement message (cycle only)
- Including a statement insert (cycle only)
- Sending a letter
- Sending the account to a collections queue
- Setting a block code

## Credit Line Management

Credit Line actions take place only at cycle. They are:

- Increasing or decreasing a credit or cash line
- Printing a statement message
- Sending a letter
- Waiving an overlimit fee

## Reissue

Reissue combines preset actions, such as whether or not to reissue the plastic, and user-defined actions, such as notifications.

## Authorizations

Authorizations combines preset actions, such as whether to approve, decline, or refer the transaction, and user-defined actions, such as notifications.

## Marketing Communications

All actions are user-defined, such as sending letters or creating a queue for a telemarketing campaign.

## Performance-based Pricing

All actions are user-defined, such as specifying the APR or fee waiver period.

## Fraud Intercept

All actions are user-defined, such as flagging an account for authorization time review.

*Note: Do not change the definition of a scenario if it is in use, especially in the Delinquent Collections decision area. Instead, create a new scenario with an unused ID. When you are certain the old ID is no longer in use, you can re-use it. For example, if you have defined scenario 017 as a mild reminder letter and then redefine it as a manual collections queue identifier without verifying that it is no longer in use, you may inadvertently send good accounts to collections and create a customer service nightmare!*

## Strategy Element Five: Strategy IDs

Strategy IDs are the glue that binds strategy keys, strategy definitions, and triggers together. The Strategy ID is displayed across the top of both trees and tables. For more information on Strategy IDs, see the chapter *Strategy Assignment*.

## Creating Sample Strategies

To explore the interaction of the TRIAD system components, let's develop a simple Credit Line strategy. We start by creating a Champion strategy modeled on the existing credit line decision process.

### Creating the Pseudo-Champion

The existing Credit Line process reviews all accounts for an increase every twelve months. Accounts must be non-delinquent and on the books at least 24 months to qualify for a review. If an account does not get an increase, it is not reviewed again until the next annual full-file review. Figure 5 shows how this pseudo-champion appears when entered into a strategy tree.

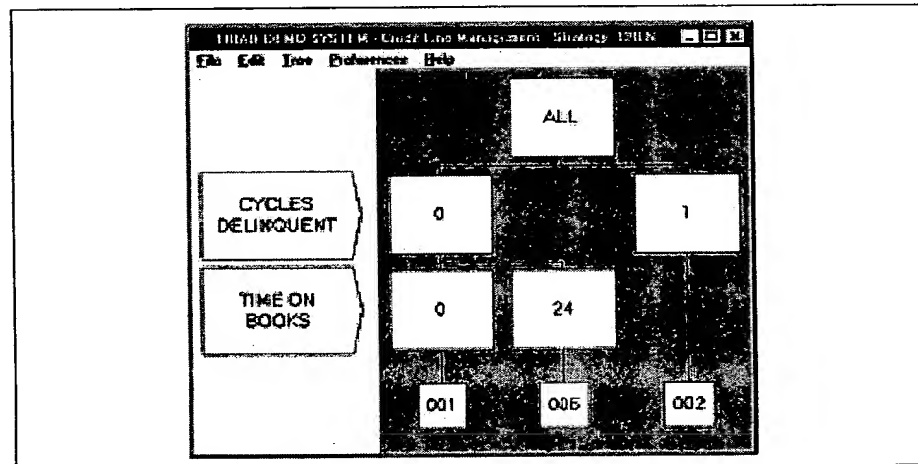


Figure 5: A pseudo-champion strategy tree.

The triggers in the Credit Line Parameters table are shown in figure 6.

The screenshot shows a software window titled "Credit Line Parameters" with a "Close" button in the top right. Below the title bar, there is a field for "Environment Name" set to "TEST". Underneath, "Strategy ID" is "10014" and "Credit Line Strategy ID" is "101". The main area is divided into two sections: "Credit Line Triggers" and "Credit Line Parameters".

**Credit Line Triggers**

Target Month	Fee Interval	Minimum Months Since Increase	Minimum Interval	Review Interval
99	99	99	12	12

**Credit Line Parameters**

Maximum Increase	Minimum Increase	Credit Line Increase Rounding Factor	Credit Line Decrease Rounding Factor	Cash Line Increase Rounding Factor	Cash Line Decrease Rounding Factor
0001000	0000500	0100	0010	0100	0010

Figure 6: Champion timing values in the Credit Line Parameters table.

## Creating the Challenger

In the following example, a Challenger is developed that will allow a greater opportunity for increasing credit lines. In order to do this, trigger values are assigned shorter intervals. In addition, several keys are added to divide accounts into finer groups resulting in different credit line increase amounts based on risk.

### Developing the Challenger Triggers

The Challenger's Credit Line triggers are different from those of the Champion. In the Champion strategy, each account is reviewed once every twelve months. If the account did not receive an increase, it is not reviewed again for another twelve months.

The Credit Line Parameters table in figure 7 shows very different trigger values for the Challenger. Notice that the Minimum Interval between reviews is now six months instead of twelve months and the Review Interval is two months. This means that each account is reviewed for an increase every six months. If an account does not receive an increase at a regularly-scheduled review, it is reviewed every two months until it does receive an increase. At that time, it reverts to the regular six month review schedule.

For more information about Triggers, see the appropriate decision area chapter.

**Credit Line Parameters**

Confirmation Name: TEST

Strategy ID: 10219 Challenge 002 [Close]

Credit Line Triggers					
Target Month	Fee Interval	Minimum Months Since Increase	Minimum Interval	Maximum Interval	
99	99	99	06	02	

Credit Line Parameters					
Maximum Increase	Minimum Increase	Credit Line Increase Rounding Factor	Credit Line Decrease Rounding Factor	Cash Line Increase Rounding Factor	Cash Line Decrease Rounding Factor
0002500	0001000	0050	0100	0050	0100

Figure 7: Challenger timing values in the Credit Line Parameters table.

## Developing the Challenger Strategy Keys

The Challenger builds on the strategy established in the Champion and adds Credit Line, Behavior Score, and Percentage of Credit Line Utilized to the existing keys. These new keys help refine the strategy and avoid missed opportunity.

## Creating the Challenger Strategy Tree

In figure 8, the first split is at the Cycles Delinquent node. The first branch is for non-delinquent accounts. The second branch is for one cycle of delinquency. The third branch is for two plus cycles. Credit line increases will occur in the non-delinquent branch, decreases in the one cycle branch, and no action in the 2+ cycle branch.

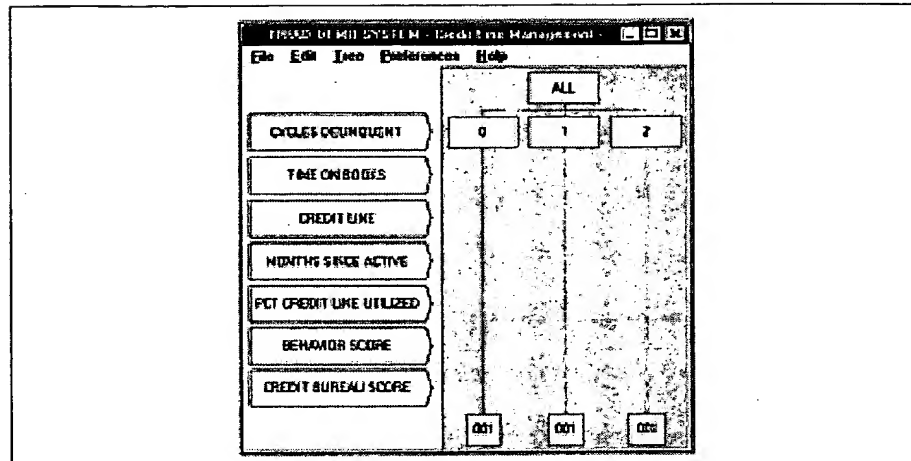


Figure 8: The Challenger Strategy tree.

Figure 9 shows the addition of the two Time on Books nodes. The first node is for accounts less than a year old. The second is for accounts one year old or greater.

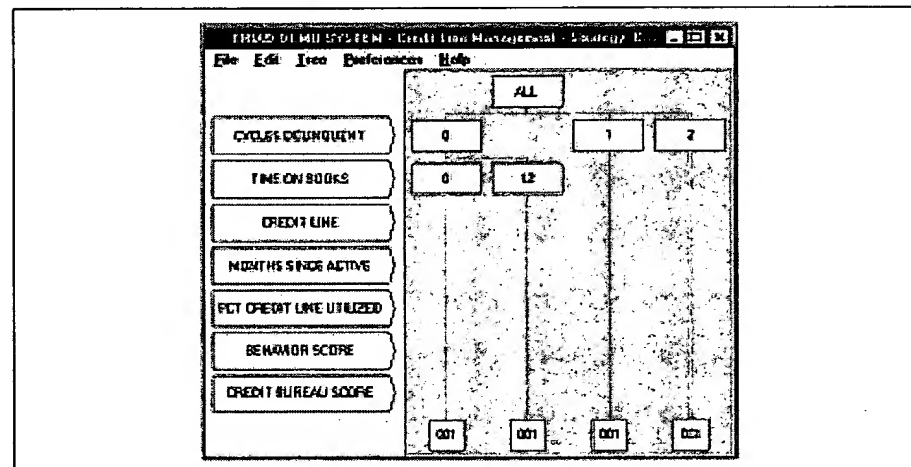


Figure 9: Adding the Time on Books nodes.

Figure 10 shows the addition of three Credit Line nodes to differentiate the amounts of increases to be granted based on the customers' already existing credit line.

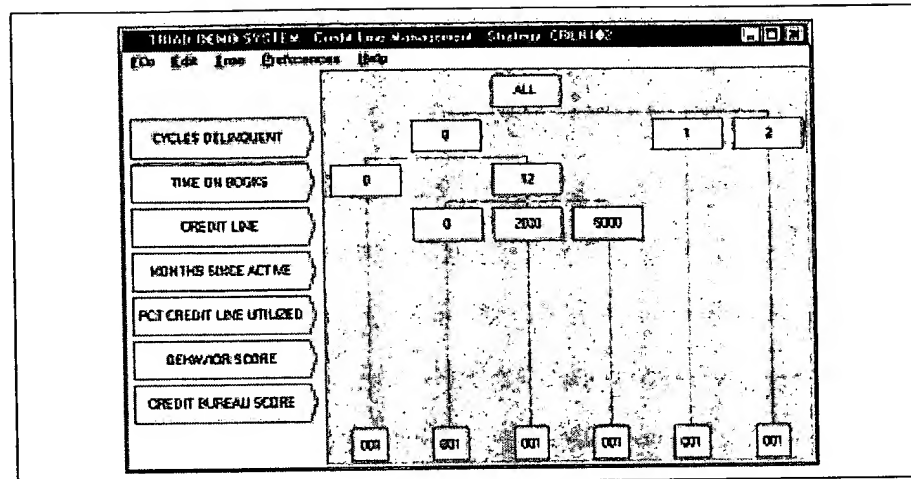


Figure 10: Adding the Credit Line nodes.

Figures 11 and 12 show the addition of the Months Since Active and Behavior Score nodes. Figure 11 shows the nodes for accounts with Months Since Active of 6 and 7 to allow marketing reactivation correspondence to be sent. Figure 12 shows the nodes broken by Behavior Score and Credit Bureau Score into risk groups for ultimate selection for line increases.

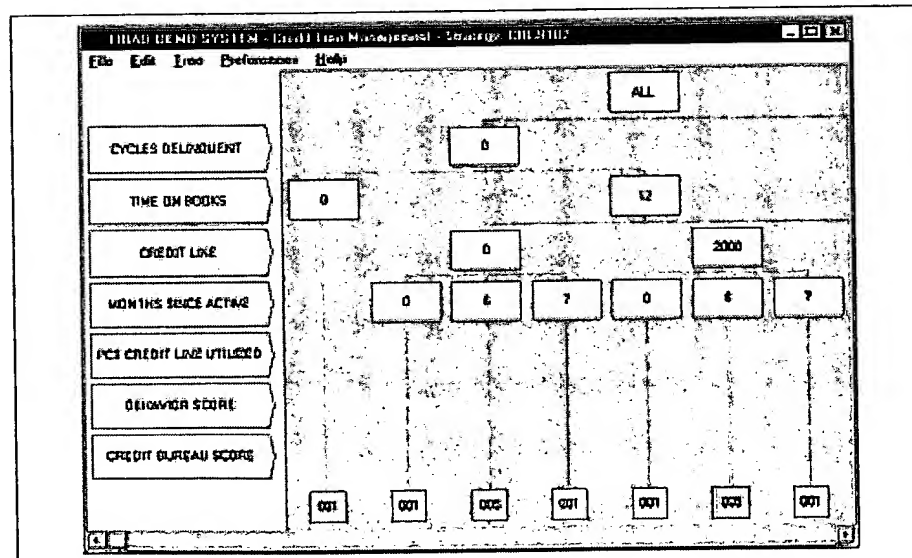


Figure 11: Adding the Months Since Active nodes.



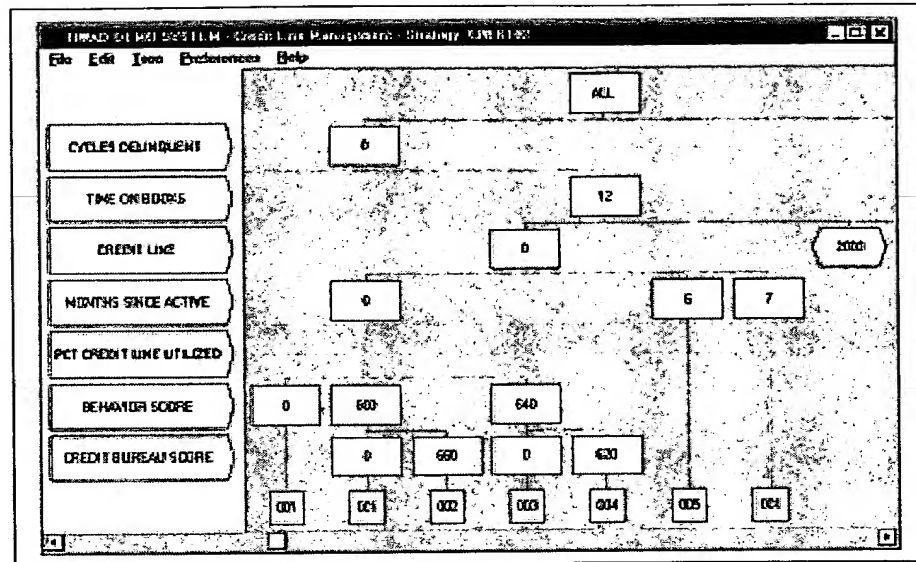
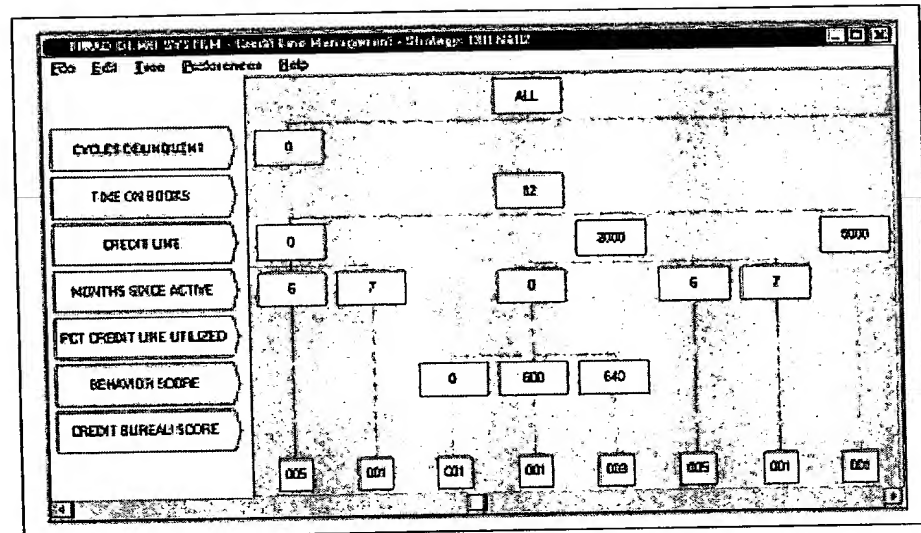


Figure 12: Adding the Behavior Score nodes

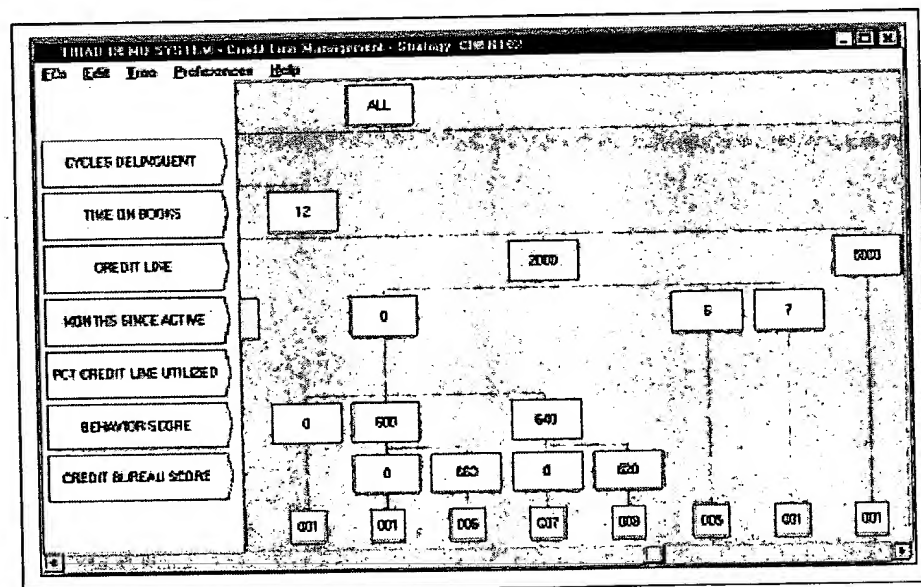
Choosing appropriate behavior scores for strategies requires knowledge of score distributions, odds, and operational volume goals. These topics are discussed in the chapter *Behavior Scoring*.

With the addition of Behavior Score nodes, the tree has become too large to view in one table without scrolling. The hexagonal nodes, also known as lozenges, indicate that the branch has been collapsed for viewing purposes. For more information on expanding and collapsing branches, see the *TRIAD Table Maintenance Guide*.

Figure 13 and figure 14 on page 76 show the development of the branches for accounts with Credit Lines between \$2000 and \$4,999. Notice that the structure is identical to the branches for lower credit lines, but the increase method used in the scenarios differs to make the scenarios more appropriate for the higher credit lines.



**Figure 13: Developing the Credit Line nodes (1 of 2).**



**Figure 14: Developing the Credit Line nodes (2 of 2).**

Figure 15 shows the 1 cycle branch first broken by the % Credit Line Utilized

node. Less than 90% used are eligible for decrease, but if greater than 90%, "the horse is already out of the barn", and no decrease is called for.

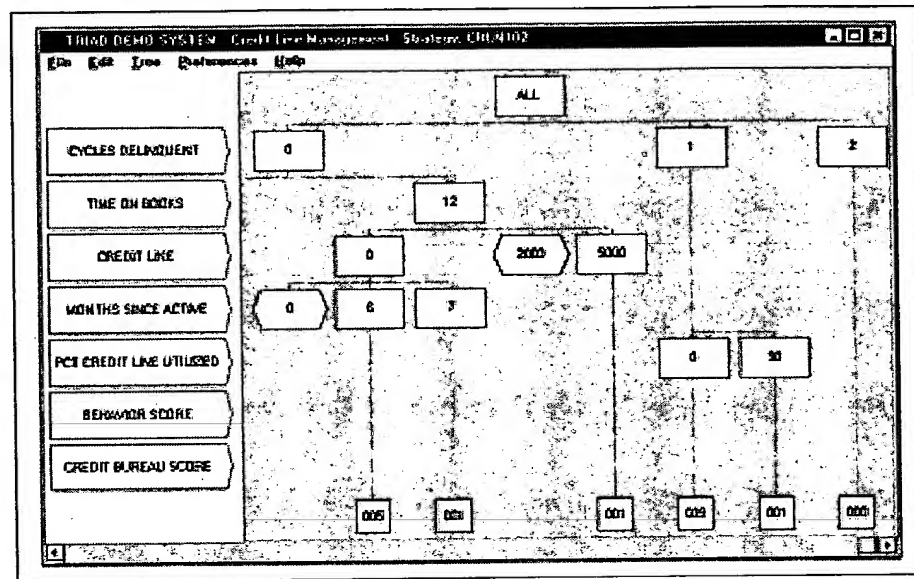


Figure 15: Adding %Credit Line Utilized nodes.

In figure 16 Behavior Score and Credit Bureau Score sort accounts by risk into groups for decreases or warning letters.

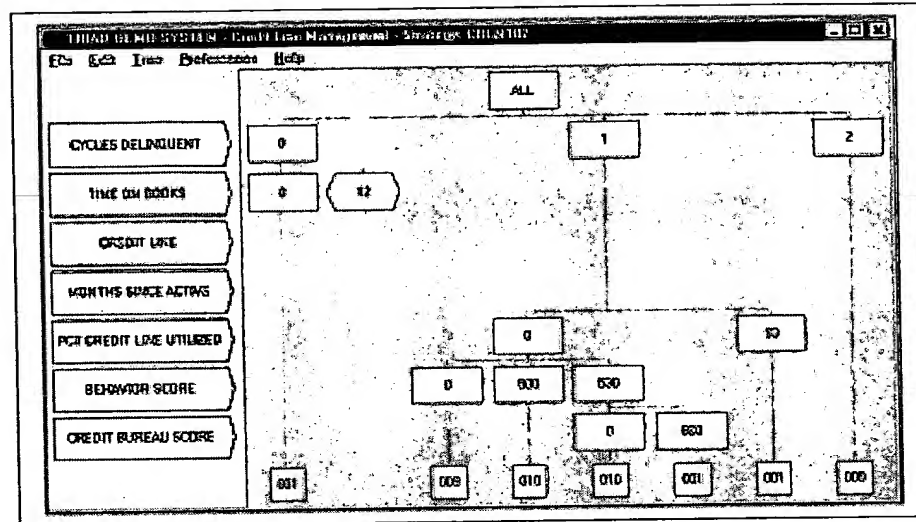


Figure 16: Adding Behavior Score and Credit Bureau Score nodes.

## Challenger Scenarios

The scenarios in the preceding example correspond to the following actions:

Table 3: Scenarios and corresponding actions.

Key	Description
Scenario 001	No action The account does not get an increase. It will be reviewed again after the Review Interval, two months in this example.
Scenario 002	\$200 increase
Scenario 003	\$400 increase
Scenario 004	\$600 increase
Scenario 005	Activation letter
Scenario 006	10% Increase
Scenario 007	15% Increase
Scenario 008	20% Increase
Scenario 009	Decrease to Balance
Scenario 010	Decrease Warning Letter

## Strategy Tips

Strategy trees should be “bushy” at the bottom, and narrow on top. Here are some other tips for building strategies:

- Keep a digit group for the original Champion as long as you can. This group shows you how TRIAD is performing compared to the methodology before TRIAD.
- Derive the Challenger from the Champion. In TRIAD terminology, that is called centering the Challenger on the Champion.
- Keep a Strategy Log in which you record strategy implementation notes such as:
  - When the strategy was first implemented.
  - The percentage of the portfolio to which it was assigned.
  - When it was assigned to a greater portion of the portfolio.
  - Changes to the strategy or its scenarios.
  - Operational considerations.
- Implement Challengers after month-end cycle, before first cycle of next month.
- Be aware of the timing of calculations within the TRIAD software. The new behavior score is calculated before any decision area processing is done and is available for use in all decision areas. The new credit line is calculated next, so it is used in subsequent decision areas, such as determining utilization in Delinquent Collections or Overlimit Collections.
- Always consider the Collections and Customer Service workload changes with a new Delinquent or Overlimit Collections strategy or when you increase the percentage of the portfolio to which they apply.
- Treat scores consistently across decision areas. For example, do not accelerate accounts into collections if they have a certain score and then give accounts with that score a credit line increase.

## Strategy Evaluation Tools

TRIAD software provides five tools for evaluating strategies, the Audit program, the Estimator reports, Cycle Tally reports, Scorecard reports, and Strategy Performance reports.

<b>Audit Program</b>	A program that validates each control table row-by-row and produces the Audit reports
<b>Estimator</b>	A program that estimates the number of accounts defined by each control table row and associated risk quality
<b>Cycle Tally Reports</b>	These reports show a tally of actions taken. Each decision area has its own reports, which are described in each decision area chapter.
<b>Scorecard Reports</b>	These reports show how your scorecards are performing. Scorecard reports are described in the chapter <i>Behavior Scoring</i> .
<b>Strategy Performance Reports</b>	These reports show how your strategies are performing. Strategy Performance reports are described in the chapter <i>Strategy Performance Reporting</i> .

## The Audit Program

The Audit program validates each control table row-by-row. It verifies that the values in each field are within acceptable ranges for processing. For example, the month portion of a date must be a value between 01 and 12. It also cross-checks tables. If a scenario is referenced in a strategy, the Audit program verifies that the Scenario ID is entered in the appropriate scenario table. When all cross-checking is finished, the Audit program produces an Audit report for each table or a report listing errors, if any have occurred.

For directions on running the Audit program, see the *TRIAD Table Maintenance Guide*. Once the program runs to successful completion, you can view the Audit reports on-line. If there are errors during the Audit run, TRIAD positions you in the error report automatically. If you double-click on the error description, TRIAD re-positions the cursor in the table with the error.

Each time you change a table, no matter how small the change, run the Audit program again. Run-time for the Audit program is negligible. The Table Maintenance System requires a clean Audit run before it prepares Estimator parameters.

Run the Audit program in production, too. There, it provides a safety net to ensure that the tables are in reasonable condition. And it provides a record of the production control tables. Figure 17 shows a sample Audit report.

Report Audit Table

TABLE DATED TODAY  
 REPORT ID : 2000000-00-00-00  
 PROCESSING DATE : 22/09/1997

TABLE - STRATEGY ACCOUNT ASSIGNMENT SOFTWARE  
 AUDIT CONTROL TABLE REPORT

DATE :  
 RUN DATE : 22/09/97  
 RUN TIME : 10:3

STRATEGY FORWARD ASSIGNMENT TABLE

ROW NO	PROJECT CODE	TITLE CODE	SFD
0001	000000	000000	01
0002		000001	02
0003		000002	03
0004		000003	04
0005	000004	000000	05
0006		000002	06
0007		000003	07

Page 1

Figure 17: Sample Audit report.

## Estimator Programs and Reports

The purpose of the Estimator program is to help you evaluate the impact of your new strategies before you implement them. The Estimator program estimates the number of accounts defined by each row of your control tables and the risk level of those accounts. The Estimator produces a series of reports that are used in strategy development to forecast strategy outcomes, estimate the effects of strategies on your operations, and to analyze the strategies for consistency. As such, Estimator reports are extremely valuable tools in strategy development. Reports can be produced for each decision area.

As you review your Estimator reports, look for strategy lines with few or no assigned accounts. In such cases, the reasoning behind such strategy segmentation should be reexamined. The value associated with that branch of the tree may need to be changed, or the branch could simply be deleted. Another possibility could be that data fields are not mapped properly to the strategy key in question.

## Running the Estimator Program

The Estimator program runs on the mainframe using development control tables (or production control tables) and the production Report Record file. The process for running the Estimator program begins on the PC-based Table Maintenance System.

First, you must run the Audit program (see the chapter *Creating Strategies* for instructions on running the Audit). When it has run to successful completion, the system prompts you to prepare a set of parameters for the Estimator using

the Estimator Control dialog box as shown in figure 18. These parameters let you designate a processing date, specify whether to realign behavior scores, choose a SPID on which to run the report, specify the way that data are grouped in the reports (by Strategy, SPID, or SPID and Random Digit Group), choose a report version, and choose a report set to run:

- Total Amount report
- Average Amount report
- % of Column report
- % of Row report

The content of an Estimator report varies across decision areas. The basic statistics provided for all decision areas (with the exception of Authorizations) are the total number of accounts, the number of scored accounts, and the odds for these accounts. For Authorizations, the basic statistics are the number of transactions, the number transactions with behavior scores, and the corresponding odds.

In addition, Estimator reports provide such measures as balance, the number of accounts with line changes, the amount of line changes, and other types of information. Please note that these statistics vary by decision area.

The Total Amount report is generally the most useful. It shows the number of accounts in each line of the table. The % of Column report, which shows the number of accounts in each cell divided by the total number of accounts in the column, can be a good reference to help identify lines with too many or too few accounts. The % of Row report shows the total number of accounts in each cell, divided by the total number of accounts in the row. This report can be useful where the report contains multiple columns; it is not particularly useful for Delinquent Collections, since these reports contain only one column. The Total Amount, % of Column, and % of Row reports all show equivalent calculations for each of the decision area statistics. The Average Amount report shows the total number of accounts along with the average of each monetary statistic in each cell in the report.

Generally, the Strategy-level Roll-up Option will best serve your needs. The other options should be used if a more specific analysis of a strategy's impact is desired. For more information on these parameters see the chapter *Creating Strategies*.



Estimator Control	
Estimated Date: 1/1/97	
Expected Processing Date (YYYYMMDD):	
Reassign Scenario?:	<input checked="" type="checkbox"/>
Authorization History Indicator:	<input checked="" type="checkbox"/>
<b>Report Options</b>	<b>Report Set</b>
SPID Selection: All	Total Amount: <input checked="" type="checkbox"/>
Field-to-Option: 0	Average Amount: <input checked="" type="checkbox"/>
	It of Columns: <input checked="" type="checkbox"/>
	% of Rows: <input checked="" type="checkbox"/>
	<b>Report Version</b>
	GoldCell Report: <input checked="" type="checkbox"/>
	Strategic Report: <input checked="" type="checkbox"/>
	Strategy Report: <input checked="" type="checkbox"/>
	Scenario Report: <input checked="" type="checkbox"/>
	TbDefn Report: <input checked="" type="checkbox"/>
OK	

Figure 18: The Estimator Control dialog box.

Once the parameters are prepared, the Table Maintenance System converts the PC files to EBCDIC format for mainframe export. The process is described in the *TRIAD Data Processing Guide*. After the files are uploaded to the mainframe, the Estimator can be run. Protocols for moving between platforms vary. Check with your system administrator for specific information on uploading your files. To initiate the Estimator programs you'll need to work with your systems department.

## Role of the Report Record File

On the mainframe, selected report records feed the Estimator process. These are called Base records and they were produced in prior production runs.

Because the Report Record file is large, you may want to use only a subset for the report tallying process. In the *Strategic Portfolios* chapter in this manual we discussed using the Estimator Sample Percent field in the SPID Control table. You can select every record in the SPID for inclusion in the Estimator or you can factor-down and choose a smaller percent, like every 10th or every 25th record. Because this field is in the SPID Control file, you can alter the number of records chosen by SPID. Regardless of the factoring percent you select, your Estimator reports reflect a robust volume of accounts or transactions based on a corresponding multiplier.

*Note: The actual sampling is done outside of the Estimator program, so if you choose to sample down be sure to check with your mainframe programming staff to ensure that the appropriate subset is produced.*

## Analyzing Estimator Results

The Estimator produces a series of table image reports, including the SPID Control, Strategy Assignment, Strategy table (all decision areas), and Scenario table (all decision areas) reports. Estimator reports can be produced for each decision area.

Each line of an Estimator report shows the good/bad odds ratio. This ratio is based on the behavior score, and possibly, the credit bureau score as well. Only accounts with valid behavior scores are counted in the ratio, and the score must fall within the minimum and maximum score settings in order to be counted. Each Estimator report shows the number of scored accounts.

The first group of Estimator reports (SPID Control table and Strategy Assignment table) are the audit tables in place for the proposed strategies and scenarios. The standard reports display the number of accounts for each row in the table. Also shown are the number of scored accounts and the good/bad odds of the scored accounts.

### SPID Control Table (SpidCntl) Report

This report provides detailed information (some of which varies across decision areas) by SPID and as a total across all SPIDs. The report shows a breakdown of accounts for each SPID into evaluated, excluded, and strategy 999 categories. The number of scored accounts and the associated odds are provided for every row of information.

### Strategy Assignment Table Report

This report shows your Strategy Assignment table, with detailed information for each test digit group within each SPID. The report shows the number of accounts for each cell in the table. It also shows the number of scored accounts and the good/bad odds of the scored accounts.

### Strategy Table Report

This report shows the number of accounts for each line in a strategy table. It also shows the number of scored accounts and the good/bad odds of the scored accounts. This report is useful in evaluating the segmentation used in the strategy. It is also useful for examining the impact of the strategy on workloads for Collections.

### Scenario Table Report

This report shows the number of accounts and their odds for each scenario in the Scenario table. The report is useful for comparing the actions prescribed by the scenario to the odds for accounts assigned to the scenario. It is also useful to examine the impact of the scenario on workloads for Collections. This report comes out separately for each strategy.

### Table Definition (TblDefn) Report

This report reproduces the information found in the Strategy Definition Table in the Audit report. It shows images of all of your strategy tables, by decision area. When applicable, associated Parameters and Triggers are shown below the rows of Strategy Keys. This report does not provide information on the flow of accounts.



## 5: Strategy Assignment

### About Strategy Assignment

Strategy assignment is the process in which a portion of a portfolio is assigned to a particular decision area strategy. This pairing of strategies to groups of accounts takes place in the Strategy Assignment table.

Figure 1 shows a sample Strategy Assignment table. You access the Strategy Assignment table from the TRIAD Table Maintenance System. The *TRIAD Table Maintenance Guide* describes the fields in the table.

Strategy ID's				
Credit	Debit	Credit	Return	Authorization
701 3	801 3	901 3	101 3	999 3
Communication	Paid Based Pricing			
999 3	119 3			

Figure 1: The Strategy Assignment table.

Notice that the SPID, lower range of Digit Group, and Strategy ID for each decision area are the elements entered in the table. Strategic Portfolios (SPIDs) are discussed in the chapter *Strategic Portfolios*. Digit groups and Strategy IDs are discussed in this chapter.

## Strategy IDs

Strategy IDs are the glue that bind together the components of a strategy: the strategy key set, external triggers, and the corresponding strategy definition table. A Strategy ID is assigned to a contiguous group of random digits in the Strategy Assignment table. Assignments are by SPID, digit group, and decision area as shown in figure 1. Each decision area can have a number of Strategy IDs ranging from 001 to 999. The numbers can be identical across decision areas, but they are logically independent. That is, the same Strategy ID number can be a Champion in one decision area and a Challenger in another.

## Random Digit Groups

Random Digit Groups are ranges of contiguous random digits that divide a portfolio into test groups. Each test group is assigned to one or more strategies in the Strategy Assignment table. Assignment may differ from SPID to SPID. This division of accounts, by SPID, digit group, and decision area, is basic to TRIAD testing and reporting. It allows you to establish statistically significant tests between competing strategies in a decision area or across decision areas. This section looks at the building blocks of strategy testing:

- Random digits
- Random digit groups
- Champion/Challenger testing

## Random Digit Assignment

A random digit is a 2-digit number from 00 to 99. Each account in your master file or database must be assigned a random digit before TRIAD can be implemented in production. New accounts are assigned a random digit as they are added to the master file or the database. If an account is transferred to a new account number, the existing random digit should be transferred to the new account.

Accounts can be assigned a random digit by numbering them sequentially from 00 to 99 then back to 00. The process is repeated until all accounts have been assigned a random digit. Because the process is random, the group of accounts with each number represents 1% of the portfolio. The next step is to group random digits into contiguous groups for testing.

## Random Digit Ranges

A random digit range represents a percentage of the accounts in the portfolio. For example, the range 00 to 09 contains approximately 10% of the accounts in the portfolio. The range 50 to 99 contains approximately 50% of the accounts in the portfolio. Only the lower end of the range is entered into the Strategy Assignment Table. The upper end of the range is calculated by the system.

## Random Digit Group Size

For a statistically significant test, a test group should have at least 25,000 accounts, if possible. Work with your strategy consultant regarding the optimal size for your portfolios. Some TRIAD designs allow a maximum of twenty random digit groups. However, you can have fewer. Remember that much of TRIAD's reporting is by random digit group within SPID. The more ranges (and SPIDs) you create, the more reports TRIAD generates.

The best guidelines for random digit group size are:

- Size of the portfolio
- Your confidence in the Challenger strategy

## Digit Groups and the Strategy ID

Multiple digit groups can point to the same Strategy ID. In the sample Strategy Assignment table in Figure 5-1, each decision area has a Strategy ID field. The Strategy ID associates a decision area strategy with a particular digit group. Multiple digit groups can be associated with the same decision area Strategy ID.

You use the Strategy ID to access strategies in the Table Maintenance system. When you create a new strategy, the first thing you do is identify the Strategy ID. By assigning the Strategy ID, you associate the strategy tree with a test digit group. This is the basis for TRIAD's Champion/Challenger testing.

## Champion/Challenger Strategies

The existing strategy is the Champion. The new strategy is the Challenger. Champion and Challenger strategies are identified by Strategy ID in the Strategy Assignment table and in the corresponding decision area strategies. When you assign a new Strategy ID to a random digit group, you create a new Challenger.

Fair, Isaac recommends that you initially assign the majority of accounts to the Champion and only a small percentage to the Challenger. However, the Challenger group should be large enough to have a representative number of accounts treated in the decision area. For example, if you are testing a Delinquent Collections strategy on a 10% random digit group, only a small percentage of those accounts will be delinquent. Because of the smaller sample size, it may take longer to observe the differences in the Challenger results than with a larger sample. When a Challenger strategy outperforms an existing Champion, the Challenger can be assigned to a greater percentage of the portfolio. This is accomplished by assigning the Challenger strategy to a wider range of random digit groups.

### Creating Comparable Digit Groups

Creating digit groups in equal intervals lets you compare Champion and Challenger strategies at-a-glance as illustrated in the following table. In general, it is easier to reserve a number, such as Strategy ID 101, for use as a Champion. This facilitates visual comparisons. The only numbers with special system significance are 000 (an invalid strategy ID) and 999 (the Strategy ID meaning bypass TRIAD processing).

In table 1, the first digit group range, 00-19, is the control group. All the strategy IDs point to Champion strategies. The second digit group range introduces a Credit Line Challenger. The third group pairs an Authorization Challenger with the Credit Line. The fourth digit group range pairs Delinquent and Overlimit Collections Challengers with Champion strategies in the other decision areas. The last digit group range tests a Reissue Challenger.



Table 1: Digit groups in equal intervals.

Digit Group	Credit Line	Delinq. Coll.	Overlimit Coll.	Auths.	Reissue
00 - 19	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)
20 - 39	<u>Chall</u> (120)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)
40 - 59	<u>Chall</u> (120)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Chall</u> (410)	<u>Champ</u> (101)
60 - 79	<u>Champ</u> (101)	<u>Chall</u> (230)	<u>Chall</u> (320)	<u>Champ</u> (101)	<u>Champ</u> (101)
80 - 99	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Champ</u> (101)	<u>Chall</u> (525)

Not only can you compare any Challenger to Champion in a decision area, but you can also compare the effects of multiple tests. For example, you can determine how much value the Authorizations Challenger adds to the Credit Line Management Challenger by comparing Credit Line results between the two digit groups, 20-39 and 40-59, in the Strategy Performance reports.

### Bypassing Champion/Challenger Testing

There are times when you may want to bypass TRIAD's decision area logic. For example, the first month TRIAD is in production, you may want TRIAD to score accounts only and not provide treatment in the decision areas. To bypass TRIAD treatment for a decision area, set the Strategy ID to 999 for that decision area. Strategy ID 999 tells TRIAD not to process the account. It also sets a return indicator informing the host system to treat the account; that it was intentionally bypassed by TRIAD.



## 6: Strategy Performance Reporting

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### About the Strategy Performance Reports

The Strategy Performance reports show strategy effectiveness by contrasting financial and other performance measures. In doing so, they present a relative measure of strategy profitability. Because the reports are produced by digit group, it is easy to compare Champion and Challenger strategies. Some of the performance measures tracked are the:

- Number of current, active, inactive, and delinquent accounts
- Balance of current, active, and delinquent accounts
- Number of new charged-off and closed accounts
- Balance of new charged-off and closed accounts
- Merchandise purchase amounts for current and delinquent accounts
- Cash purchase amounts for current and delinquent accounts
- Finance charges and other fees
- Estimated profit per account and per active account

By examining these fields and the others on the report you can compare how accounts in each strategy contribute to monthly profit.

### Report Layout

TRIAD produces two Strategy Performance reports, one by SPID, Digit Group and Time on Books and one by SPID, Digit Group and Behavior Score. Row headings for both reports are identical. Column headings are different. The first summarizes financial account data by the amount of time the accounts have been open; the second summarizes current cycle financial account data by the Behavior Score at the beginning of the performance period. This performance period is set by your configuring options at project initiation. See the *TRIAD Project Guide* for the setting for your installation.

A separate three page Strategy Performance report is produced for each SPID and digit group combination defined in the Strategy Assignment table. The first page contains account and balance summary information. The second

page contains additional balance summary information for accounts with cash lines. If your installation does not have cash lines or cash balances, the second page is suppressed. The third page contains various performance measures. A total report is produced for each SPID and across all-SPIDs. Digit group ranges are not shown in the all-SPID report because the digit group ranges vary from SPID to SPID.

The reports are produced once a month, although they can be produced on-call. The Strategy Performance reports use cycle data stored in the Report Record file. The reports do not contain posting data.

Because the reports contain sum-of-cycle data, and not point-in-time month-end data, the numbers may not foot with traditional month-end reports provided by systems external to TRIAD. Another implication of this method of reporting is that your first month reports will be incomplete. This is the first month after TRIAD is installed or the first month a SPID is created from newly-acquired accounts. Also it applies the first month a new strategy is put in place.

These reports can also be produced as spreadsheet files. Contact your systems department to have these files produced for you.

## Report Headings

The same headings are used on each page of the report. The data in the heading fields is listed in table 1.

Table 1: Heading field data descriptions.

Reporting Period	Identifies the first and last cycle dates of the reported cycle. Both versions of the Strategy Performance report use cycle records. The first date in the Reporting Period is the earliest cycle date in the file and the last date is the latest cycle date in the file.
Strategic Portfolio ID	Identifies the strategic portfolio examined in this report. This field is blank in the pages of this report that contain information for all the strategic portfolios combined.
SPID Name	Names the strategic portfolio examined in this report. This field reads "ALL" in the pages that report on all the strategic portfolios combined.
Digit Group	Identifies the digit group in this section of the report. This field is 00-99 in the pages that report on all digit groups combined.
Time on Books	Identifies the number of months that accounts have been open, displayed as a range. The Time on Books ranges are the column headings for the Strategy Performance report By SPID, Digit Group and Time on Books. They are set in the Report Ranges table of the TMS, as described in the <i>TRIAD Table Maintenance Guide</i> .

Table 1: Heading field data descriptions. (continued)

Behavior Score (nn months)	Identifies the behavior score ranges as of the indicated number of months ago. The number of months ago is the performance period, often six months. The behavior score ranges are the column headings for the Strategy Performance report By SPID, Digit Group and Behavior Score. The ranges are set in the Report Ranges table of the TMS, as described in the TRIAD Table Maintenance Guide.
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## The Report: First Page

The first page of the Strategy Performance reports contains account summary information for the digit group. Accounts are tallied by status categories such as open/closed, active/inactive, current/levels of delinquency, and charge-off/closed categories. The corresponding balances are also tallied.

Figure 1 is the first page of the Strategy Performance Report by SPID, Digit Group and Time on Books.

TRIAD DEMO SYSTEM REPORT ID : TRDCGPP-01-V5.0		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE STRATEGY PERFORMANCE REPORT BY SPID, DIGIT GROUP AND TIME ON BOOKS REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										PAGE NO : 125 RUN DATE : 08/02/1997 RUN TIME : 23:39:52
STRATEGIC PORTFOLIO ID : -- DIGIT GROUP : 00-99		SPID NAME : ALL										
		TIME ON BOOKS ( IN MONTHS )										
		000-005	006-011	012-017	018-023	024-029	030-035	036-047	048-059	060-999	TOTAL	
ACCOUNT SUMMARY :		27,931	31,240	19,319	39,180	24,187	25,796	52,951	54,840	506,896	782,340	
TOTAL ACCTS :		16,505	21,673	14,624	25,896	15,431	14,135	26,650	25,839	218,567	379,320	
ACTIVE ACCTS :		59.09	69.38	75.70	66.09	61.80	54.80	50.33	47.12	43.12	48.49	
INACTIVE ACCTS :		10,653	8,537	2,968	6,772	3,697	4,571	8,759	7,611	65,987	119,555	
PCT TOTAL :		51.54	40.11	33.53	35.18	32.15	38.63	43.18	41.02	34.22	38.60	
CURRENT ACCTS :		5,494	18,637	7,516	22,418	70,568	50,957	73,900	95,803	44,392	309,685	
PCT ACTIVE :		5.45	87.89	87.78	86.86	84.49	87.48	88.58	89.58	90.71	88.08	
1 CYCLE ACCTS :		257	2,126	740	2,465	8,921	5,085	6,840	7,870	3,330	37,634	
PCT ACTIVE :		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51	
2 CYCLE ACCTS :		5	339	180	541	2,278	1,267	1,580	1,083	715	8,788	
PCT ACTIVE :		0.09	1.60	2.10	2.10	2.73	2.17	1.89	1.76	1.46	1.99	
3 CYCLE ACCTS :		0	80	62	173	829	453	535	684	262	3,078	
PCT ACTIVE :		0.00	0.38	0.72	0.67	0.99	0.78	0.64	0.64	0.54	0.70	
4+CYCLE ACCTS :		0	23	64	212	924	491	571	707	241	3,233	
PCT ACTIVE :		0.00	0.11	0.75	0.82	1.11	0.84	0.68	0.66	0.49	0.73	
NEW CHARGE OFF ACCTS :		0	9	5	27	78	33	44	81	50	327	
BANKRUPT FRAUD :		12	10	3	7	23	18	10	10	13	106	
OTHER :		0	2	12	56	228	107	144	212	116	877	
NEW CLOSED ACCOUNTS :		9	44	18	87	304	199	252	317	166	1,396	
VOLUNTARY :		4	32	28	85	318	188	169	255	108	1,187	
OTHER :												
BALANCE SUMMARY :												
TOTAL BAL (000) :		2,733	15,155	6,814	22,725	75,536	47,500	66,206	89,520	41,834	368,027	
AVG BAL :		474.89	714.73	795.93	880.51	904.41	815.42	793.60	837.05	854.82	831.86	
CURRENT BAL (000) :		2,509	12,330	5,397	17,604	56,218	36,734	52,473	73,103	34,575	290,947	
AVG BAL :		456.76	681.61	718.09	785.31	796.66	720.89	710.07	763.06	778.86	746.62	
PCT / TOTAL BAL :		91.80	81.36	79.20	77.47	74.43	77.33	79.24	81.66	82.65	79.06	
1 CYCLE TOTAL BAL :		204,387	2,213,862	901,663	3,360,412	12,290,047	7,008,610	9,140,039	10,759,353	4,795,766	50,674,144	
AVG BAL :		795.28	1,041.33	1,218.46	1,363.25	1,377.65	1,378.29	1,336.26	1,367.14	1,440.17	1,346.50	
PCT / TOTAL :		7.48	14.61	13.23	14.79	16.27	14.75	13.81	12.02	11.46	13.77	
2 CYCLE TOTAL BAL :		5,576	435,148	262,724	859,199	3,446,500	1,827,962	2,369,436	2,791,496	1,142,334	13,240,379	
AVG BAL :		1,115.39	1,283.62	1,459.58	1,588.17	1,512.95	1,521.68	1,499.64	1,482.47	1,597.67	1,506.64	
PCT / TOTAL :		0.20	2.87	3.86	3.78	4.56	4.06	3.58	3.12	2.73	3.60	
3 CYCLE TOTAL BAL :		0	113,591	95,444	305,456	1,339,174	713,694	833,165	1,069,587	505,070	4,975,186	
AVG BAL :		0.00	1,419.90	1,539.42	1,765.65	1,615.41	1,575.48	1,557.32	1,563.72	1,927.75	1,616.37	
PCT / TOTAL :		0.00	0.75	1.40	1.34	1.77	1.50	1.26	1.19	1.21	1.35	
4+CYCLE TOTAL BAL :		0	43,032	119,018	412,249	1,644,448	848,645	1,041,514	1,229,098	448,874	5,786,881	
AVG BAL :		0.00	1,070.96	1,859.66	1,944.57	1,779.71	1,728.40	1,024.02	1,738.47	1,862.55	1,789.94	
PCT / TOTAL :		0.00	0.28	1.75	1.81	2.18	1.79	1.57	1.37	1.07	1.57	
NEW CHARGE OFF BALANCE :		0	12,223	9,950	56,474	154,331	62,757	86,443	161,051	95,181	638,414	
BANKRUPT TOTAL :		0.00	1,358.17	1,990.15	2,091.65	1,978.61	1,901.74	1,964.64	1,988.29	1,903.63	1,952.34	
FRAUD TOTAL :		11,244	3,908	4,490	9,418	5,920	3,938	4,557	3,195	18,457	65,130	
AVG BAL :		937.04	390.81	1,496.79	1,745.48	257.39	218.80	455.80	319.50	1,419.81	614.44	
OTHERS :		0	2,261	24,326	116,979	436,822	201,052	256,767	402,640	248,594	1,689,446	
AVG BAL :		0.00	1,130.75	2,027.24	2,088.92	1,915.89	1,879.00	1,783.11	1,899.25	2,143.06	1,926.39	
NEW CLOSED ACCT BAL :												
VOLUNTARY :		3,318	16,780	13,359	71,567	171,545	100,268	112,311	146,795	68,181	704,128	
OTHER :		3,719	58,530	52,252	160,766	516,070	305,131	246,087	388,515	158,343	1,889,418	

Figure 1: Strategy Perf Report By SPID, Digit Group and Time On Books report, first page.

Figure 2 is the first page of the Strategy Performance Report by SPID, Digit Group and Behavior Score. A description of the fields on the two reports follows.

TRIAD DEMO SYSTEM REPORT ID : TRDC60PP-02-V5.0		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE STRATEGY PERFORMANCE REPORT BY SPID, DIGIT GROUP AND BEHAVIOR SCORE REPORTING PERIOD - 07/01/1997 THRU 07/29/1997							PAGE NO : 1 RUN DATE : 08/02/1997 RUN TIME : 23:39:52		
STRATEGIC PORTFOLIO ID : -- DIGIT GROUP : 00-99									SPID NAME: ALL		
		----- BEHAVIOR SCORE ( 6 MONTHS AGO) -----									
		UNSCORED	100-215	216-299	300-650	651-683	684-708	709-726	727-747	748-999	TOTAL
ACCOUNT SUMMARY :											
TOTAL ACCTS		315,320	1,248	1,938	143,068	63,266	69,913	65,969	58,388	63,230	782,340
ACTIVE ACCTS		31,716	1,062	1,591	123,835	49,660	46,107	42,160	40,122	43,067	379,320
PCT TOTAL		10.06	85.10	82.09	86.56	78.49	65.95	63.91	68.72	68.11	48.49
INACTIVE OPEN ACCTS		24,861	5	24	9,924	9,715	18,840	20,532	16,504	19,150	119,555
PCT TOTAL		7.88	0.40	1.24	6.94	15.36	26.95	31.12	28.27	30.29	15.28
CURRENT ACCTS		28,646	284	462	89,941	45,119	43,224	40,459	39,073	42,327	329,535
PCT ACTIVE		90.32	26.74	29.04	72.63	90.86	93.75	95.97	97.39	98.28	86.88
1 CYCLE ACCTS		2,843	138	327	27,008	4,404	2,820	1,677	1,040	735	40,992
PCT ACTIVE		8.96	12.99	20.55	21.81	8.87	6.12	3.98	2.59	1.71	10.81
2 CYCLE ACCTS		66	119	257	1,842	72	25	11	2	1	4,395
PCT ACTIVE		0.21	11.21	16.15	3.10	0.14	0.05	0.03	0.00	0.00	1.16
3 CYCLE ACCTS		100	86	138	1,422	40	25	7	5	3	1,826
PCT ACTIVE		0.32	8.10	8.67	1.15	0.08	0.05	0.02	0.01	0.01	0.48
4-CYCLE ACCTS		61	435	407	1,622	25	13	6	2	1	2,572
PCT ACTIVE		.19	40.96	25.58	1.31	0.05	0.03	0.01	0.00	0.00	0.68
NEW CHARGEOFF ACCTS :											
BANKRUPT		6	4	2	77	6	3	1	0	0	99
FRAUD		0	0	0	0	0	0	0	0	0	0
OTHER		16	53	245	245	13	5	1	2	1	375
NEW CLOSED ACCOUNTS :											
VOLUNTARY		253	0	431	431	245	358	175	125	54	1,645
OTHER		20,264	1,078	1,506	11,576	613	381	259	158	152	35,987
BALANCE SUMMARY :											
TOTAL BAL (000)		22,031	1,739	1,612	193,379	63,724	40,394	21,838	18,888	14,554	378,161
AVG BAL		694.66	1,637.93	1,013.22	1,561.59	1,283.21	876.10	517.99	470.77	337.94	896.95
CURRENT BAL (000)		18,600	362	368	136,844	57,716	37,627	20,568	18,134	14,131	304,354
AVG BAL		649.33	1,274.80	797.77	1,521.49	1,279.21	870.52	508.38	464.12	333.87	823.59
PCT / TOTAL BAL		84.43	20.81	22.86	70.76	90.57	93.15	94.19	96.01	97.10	80.48
1 CYCLE TOTAL BAL		3,072,685	195,248	283,323	44,812,769	5,733,688	2,700,823	1,243,065	743,829	414,605	59,200,039
AVG BAL		1,080.79	1,414.84	866.43	1,659.24	1,301.93	957.74	741.24	715.22	564.09	1,444.19
PCT / TOTAL		13.95	11.22	17.58	23.17	9.00	6.69	5.69	3.94	2.85	15.65
2 CYCLE TOTAL BAL		95,471	169,459	247,166	6,011,313	134,557	21,293	11,426	554	75	6,691,318
AVG BAL		1,446.54	1,424.03	961.74	1,564.63	1,868.86	851.76	1,038.79	277.04	75.31	1,522.48
PCT / TOTAL		0.43	9.74	15.33	3.11	0.21	0.05	0.05	0.00	0.00	1.77
3 CYCLE TOTAL BAL		121,595	162,884	143,943	2,284,747	40,964	19,734	7,624	2,307	7,162	2,790,964
AVG BAL		1,215.95	1,894.00	1,043.07	1,606.71	1,024.12	789.39	1,089.23	461.54	2,387.65	1,528.46
PCT / TOTAL		0.55	9.34	8.93	1.18	0.06	0.05	0.03	0.01	0.05	0.74
4-CYCLE TOTAL BAL		97,185	735,853	516,753	2,821,048	55,228	15,643	6,214	5,110	176	4,253,214
AVG BAL		1,593.20	1,691.62	1,269.66	1,739.24	2,209.16	1,203.33	1,035.75	2,555.48	176.12	1,653.66
PCT / TOTAL		0.44	42.30	32.06	1.46	0.09	0.04	0.03	0.03	0.00	1.12
NEW CHARGEOFF BALANCE:											
BANKRUPT TOTAL		16,010	9,830	2,263	169,930	14,717	4,237	471	0	0	217,461
AVG BAL		2,668.44	2,457.69	1,131.67	2,206.89	2,452.88	1,412.60	471.58	0.00	0.00	2,196.58
FRAUD TOTAL		0	0	0	0	0	0	0	0	0	0
AVG BAL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHERS TOTAL		27,993	104,234	51,554	439,378	28,446	5,209	917	1,974	290	659,998
AVG BAL		1,749.59	1,966.69	1,321.91	1,793.38	2,188.22	1,041.80	917.14	987.16	290.39	1,760.00
NEW CLOSED ACCT BAL :											
VOLUNTARY		34,662	0	7,481	262,318	44,974	16,348	18,031	7,983	2,354	394,154
OTHER		437,436	954,111	645,724	7,602,352	294,601	118,200	61,198	42,246	25,864	10,181,736

Figure 2: Strategy Perf Report By SPID, Digit Group and Behavior Score report, first page.

## Field Reference for Page 1

The first page of a Strategy Performance report summarizes six general areas: Account Summary, New Charge-off Accounts, New Closed Accounts, Balance Summary, New Charge-off Balance and New Closed Account Balance. The fields that comprise each of these areas are described in table 2.

Table 2: Fields in page 1 of the Strategy Performance report.

Account Summary	Title for section summarizing data by activity and delinquency level.
Total Accounts	Total number of accounts in each range in this digit group. This number includes active, inactive, and closed accounts, both this cycle (as tallied below) and previous cycles.
Active Accounts	Number of accounts with a non-zero balance. This number includes closed accounts with a balance. It does not include charged-off accounts or closed accounts with a zero balance. Pct Total = Percent of total accounts with a non-zero balance.
Inactive Open Accounts	Total number of open accounts with a zero balance. Inactive closed accounts do not have a separate line item on this report Pct Total = Percent of total open accounts having a zero balance.
Current Accounts	Total number of active accounts that are not delinquent. Pct Active = Percent of active accounts that are not delinquent.
1 Cycle Accounts	Total number of 1-cycle delinquent accounts. Pct Active = Percent of active accounts that are 1-cycle delinquent.
2 Cycle Accounts	Total number of 2-cycle delinquent accounts. Pct Active = Percent of active accounts that are 2-cycles delinquent.
3 Cycle Accounts	Total number of 3-cycle delinquent accounts. Pct Active = Percent of active accounts that are 3-cycles delinquent.
4+ Cycle Accounts	Total number of accounts 4+ cycles delinquent. Pct Active = Percent of active accounts that are 4+ cycles delinquent (excluding charged-off accounts).
New Charge-off Accounts	Title for section summarizing the number of accounts charged-off this cycle. Old charge-off accounts are not tallied in this report.
Bankrupt	Total number of accounts charged-off due to bankruptcy.
Fraud	Total number of accounts charged-off due to fraud.
Other	Total number of accounts charged-off due to reasons other than bankruptcy or fraud (for example, delinquent aging).
New Closed Accounts	Title for section summarizing data about accounts closed this cycle. Old closed accounts are tallied in Total Accounts but are not tallied in this section.
Voluntary	Total number of accounts closed voluntarily by the customer this cycle.
Other	Total number of accounts closed this cycle for reasons other than voluntary.

Table 2: Fields in page 1 of the Strategy Performance report. (continued)

Balance Summary	Title for section summarizing balance data by activity status and delinquency level. Balances are expressed in currency units as indicated in parentheses; for example (000) means multiply the number by 1000.
Total Balance (000)	Sum of the statement balances in thousands. Avg Bal = Average statement balance for accounts.
Current Bal (000)	Sum of the statement balances in thousands for non-delinquent accounts. Avg Bal = Average statement balance for non-delinquent accounts. Pct/Total Bal = Percent of the total statement balance for accounts within each range that are not delinquent.
1 Cycle Total Bal	Sum of the statement balances for 1-cycle delinquent accounts. Avg Bal = Average statement balance for 1-cycle delinquent accounts. Pct/Total = Percent of the total statement balance from 1-cycle delinquent accounts.
2 Cycle Total Bal	Sum of the statement balances for 2-cycle delinquent accounts. Avg Bal = Average statement balance for 2-cycle delinquent accounts. Pct/Total = Percent of the total statement balance from 2-cycle delinquent accounts.
3 Cycle Total Bal	Sum of statement balances for 3-cycle delinquent accounts. Avg Bal = Average statement balance for 3-cycle delinquent accounts. Pct/Total = Percent of the total statement balance from 3-cycle delinquent accounts.
4+ Cycle Total Bal	Sum of statement balances for 4+ cycle delinquent accounts. Avg Bal = Average statement balance for 4+ cycle delinquent accounts. Pct/Total = Percent of the total statement balance from 4+ cycle delinquent accounts.
New Charge-off Balance	Title of section summarizing balance data for accounts charged-off this cycle.
Bankrupt Total	Sum of the statement balances for accounts that were charged-off due to bankruptcy. Avg Bal = Average statement balance for accounts charged-off due to bankruptcy.
Fraud Total	Sum of statement balances for accounts that were charged-off due to fraud. Avg Bal = Average statement balance for accounts charged-off due to fraud.
Others Total	Sum of the statement balances for accounts that were charged off for reasons other than bankruptcy or fraud. Avg Bal = Average statement balance for accounts that charged off for reasons other than bankruptcy or fraud.
New Closed Account Balance	Section summarizes the balances of accounts closed this cycle for the reasons listed below.
Voluntary	Sum of the statement balances for accounts closed voluntarily by the customer this cycle.
Other	Sum of the statement balances for accounts closed this cycle for reasons other than voluntary closure.



## The Report: Second Page

The second page of a Strategy Performance report contains balance summary information for the digit group. This page is printed only if you have separate cash balances as indicated by the setting of the Cash Line Reporting Switch in the System Control Fields table of the TMS. Balances are tallied in the merchandise or cash sections. Within each section, balances are reported by delinquency level, charge-off status, and closure categories.

Figure 3 is the second page of the Strategy Performance Report by SPID, Digit Group and Time on Books.

TRIAD DEMO SYSTEM REPORT ID : TRDCGPP-01-V5.0	TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE STRATEGY PERFORMANCE REPORT BY SPID, DIGIT GROUP AND TIME ON BOOKS REPORTING PERIOD - 07/01/1997 THRU 07/29/1997	PAGE NO : 2 RUN DATE : 08/02/1997 RUN TIME : 23:39:52								
STRATEGIC PORTFOLIO ID : 01 DIGIT GROUP : 00-04		SPID NAME : REGULAR								
TIME ON BOOKS ( IN MONTHS )										
000-005	006-011	012-017	018-023	024-029	030-035	036-047	048-059	060-999	TOTAL	
MCH BALANCE SUMMARY :										
TOTAL BAL (000)	11,909	35,492	12,942	40,070	124,168	95,677	147,922	183,097	75,348	726,625
AVG BAL	5,756	21,205	8,562	25,809	83,520	58,253	83,426	106,947	48,940	442,418
CURRENT BAL (000)	5,494	18,637	7,516	22,418	70,568	50,957	73,900	95,803	44,392	389,685
AVG BAL	95.45	87.89	87.78	86.86	84.49	87.48	88.58	89.58	90.71	88.08
PCT / TOTAL BAL	95.45	87.89	87.78	86.86	84.49	87.48	88.58	89.58	90.71	88.08
1 CYCLE TOTAL BAL	257	2,126	740	2,465	8,921	5,085	6,840	7,070	3,330	37,634
AVG BAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
PCT / TOTAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
2 CYCLE TOTAL BAL	5	339	180	541	2,378	1,267	1,580	1,883	715	8,788
AVG BAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
PCT / TOTAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
3 CYCLE TOTAL BAL	0	80	62	173	829	453	535	684	262	3,078
AVG BAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
PCT / TOTAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
4+CYCLE TOTAL BAL	0	23	64	212	924	491	571	707	241	3,233
AVG BAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
PCT / TOTAL	4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51
TOTAL NEW CHARGEDOFF :										
BANKRUPT	0	9	5	27	78	33	44	81	50	327
FRAUD	12	10	3	7	23	18	10	10	13	106
OTHERS	0	2	12	56	228	107	144	212	116	877
TOTAL NEW CLOSED :										
VOLUNTARY CLOSED	9	44	18	87	304	199	252	317	166	1,396
OTHER CLOSED	4	32	28	85	310	188	169	255	108	1,187
CASH BALANCE SUMMARY :										
TOTAL BAL (000)	2,733	15,155	6,814	22,725	75,536	47,500	66,206	89,520	41,834	368,027
AVG BAL	474.89	714.73	795.93	880.51	904.41	815.42	793.60	837.05	854.82	831.86
CURRENT BAL (000)	2,509	12,330	5,397	17,604	56,218	36,734	52,473	73,103	34,575	290,947
AVG BAL	456.76	661.61	718.09	785.31	796.66	720.89	710.07	763.06	778.86	746.62
PCT / TOTAL BAL	91.80	81.36	79.20	77.47	74.43	77.33	79.26	83.66	82.65	79.06
1 CYCLE TOTAL BAL	204,387	2,213,862	901,663	3,360,412	12,290,047	7,008,610	9,140,039	10,759,353	4,795,766	50,674,144
AVG BAL	795.28	1,041.33	1,218.46	1,363.25	1,377.65	1,378.29	1,336.26	1,367.14	1,440.17	1,346.50
PCT / TOTAL	7.48	14.61	13.23	14.79	16.27	14.75	13.81	12.02	11.46	13.77
2 CYCLE TOTAL BAL	5,576	435,148	262,724	859,199	3,446,500	1,927,962	2,369,434	2,791,496	1,142,334	13,240,379
AVG BAL	1,115.39	1,283.62	1,459.58	1,588.17	1,512.95	1,521.68	1,499.64	1,482.47	1,597.67	1,506.64
PCT / TOTAL	0.20	2.87	3.86	3.78	4.56	4.06	3.58	3.12	2.73	3.40
3 CYCLE TOTAL BAL	0	113,591	95,444	305,456	1,339,174	713,694	833,165	1,069,587	505,070	4,975,186
AVG BAL	0.00	1,419.90	1,539.42	1,765.45	1,615.41	1,575.48	1,557.32	1,563.72	1,927.75	1,616.37
PCT / TOTAL	0.00	0.75	1.40	1.34	1.77	1.50	1.26	1.19	1.21	1.35
4+CYCLE TOTAL BAL	0	43,032	119,018	412,249	1,644,448	848,645	1,041,514	1,229,098	448,874	5,786,881
AVG BAL	0.00	1,870.96	1,859.66	1,944.57	1,779.71	1,728.40	1,824.02	1,738.47	1,862.55	1,789.94
PCT / TOTAL	0.00	0.28	1.75	1.81	2.18	1.79	1.57	1.37	1.07	1.57
TOTAL NEW CHARGEDOFF :										
BANKRUPT TOTAL	0	12,223	9,950	56,474	154,331	62,757	86,443	161,051	95,181	638,414
FRAUD TOTAL	11,244	3,908	4,490	9,418	5,920	3,938	4,557	3,195	18,457	65,110
OTHERS TOTAL	0	2,261	24,326	116,979	436,822	201,052	256,767	402,640	248,594	1,689,446
TOTAL NEW CLOSED :										
VOLUNTARY CLOSED	3,318	16,780	13,359	71,567	171,545	100,268	112,311	146,795	68,181	704,128
OTHER CLOSED	3,719	58,530	52,252	160,766	516,070	305,131	246,087	388,515	158,343	1,889,418

Figure 3: Strategy Perf Report By SPID, Digit Group and Time On Books report, second page.

Figure 4 is the second page of the Strategy Performance Report by SPID, Digit Group and Behavior Score. A description of the fields on the two reports follows.

TRIAD DEMO SYSTEM REPORT ID : TRDCGPP-02-V5.0		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE STRATEGY PERFORMANCE REPORT BY SPID, DIGIT GROUP AND BEHAVIOR SCORE										PAGE NO : 2 RUN DATE : 08/02/1997 RUN TIME : 21:39:52	
STRATEGIC PORTFOLIO ID : -- DIGIT GROUP : 00-99		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										SPID NAME : REGULAR	
		UNSCORED 100-215 216-299 300-650 651-683 684-708 709-726 727-747 748-999 TOTAL											
MICH BALANCE SUMMARY :													
TOTAL BAL (000)		11,509	35,492	12,942	40,070	124,168	95,677	147,922	183,097	75,348	726,625		
AVG BAL		5,756	21,205	8,562	25,809	83,520	58,253	83,426	106,947	48,940	442,418		
CURRENT BAL (000)		5,494	18,637	7,516	22,418	70,568	50,957	73,900	95,803	44,392	369,685		
AVG BAL		95.45	87.89	87.78	86.86	84.49	87.48	88.58	89.58	90.71	88.08		
PCT / TOTAL BAL		95.45	87.89	87.78	86.86	84.43	87.48	88.58	89.58	90.71	88.08		
1 CYCLE TOTAL BAL		257	2,126	740	2,465	8,921	5,085	6,840	7,870	3,330	37,634		
AVG BAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
PCT / TOTAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
2 CYCLE TOTAL BAL		5	339	180	541	2,278	1,267	1,580	1,883	715	8,788		
AVG BAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
PCT / TOTAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
3 CYCLE TOTAL BAL		0	80	62	173	829	453	535	684	262	3,078		
AVG BAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
PCT / TOTAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
4+CYCLE TOTAL BAL		0	23	64	212	924	491	571	707	241	3,233		
AVG BAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
PCT / TOTAL		4.46	10.03	8.64	9.55	10.68	8.73	8.20	7.36	6.80	8.51		
TOTAL NEW CHARGEOFF :		0	9	5	27	78	33	44	81	50	327		
BANKRUPT		12	10	3	7	23	18	10	10	13	106		
FRAUD		0	2	12	56	228	107	144	212	116	877		
OTHERS		9	44	18	87	304	199	252	317	166	1,396		
TOTAL NEW CLOSED :		4	32	28	85	318	188	169	255	108	1,187		
VOLUNTARY CLOSED													
OTHER CLOSED													
CASH BALANCE SUMMARY :													
TOTAL BAL (000)		2,733	15,155	6,814	22,725	75,536	47,500	66,206	89,520	41,834	368,027		
AVG BAL		474.89	714.73	795.93	880.51	904.41	815.42	793.60	837.05	854.82	831.86		
CURRENT BAL (000)		2,509	12,330	5,397	17,604	56,218	36,734	52,473	73,103	34,575	290,947		
AVG BAL		456.76	661.61	718.09	785.31	796.66	720.89	710.07	761.06	778.86	746.62		
PCT / TOTAL BAL		91.80	81.36	79.20	77.47	74.43	77.33	79.26	81.66	82.65	79.06		
1 CYCLE TOTAL BAL		204,387	2,213,862	901,663	3,160,412	12,290,047	7,008,610	9,140,039	10,759,353	4,795,766	50,674,144		
AVG BAL		795.28	1,041.33	1,218.46	1,363.25	1,377.65	1,378.29	1,336.26	1,367.14	1,440.17	1,346.50		
PCT / TOTAL		7.48	14.61	13.23	14.79	16.27	14.75	13.81	12.02	11.46	13.77		
2 CYCLE TOTAL BAL		5,576	435,148	262,724	859,199	3,446,500	1,927,962	2,369,434	2,791,496	1,142,334	13,240,379		
AVG BAL		1,115.39	1,283.62	1,459.58	1,588.17	1,512.95	1,521.68	1,499.64	1,482.47	1,597.67	1,506.64		
PCT / TOTAL		0.20	2.87	3.86	3.78	4.56	4.06	3.58	3.12	2.73	3.60		
3 CYCLE TOTAL BAL		0	113,591	95,444	305,456	1,339,174	713,694	833,165	1,069,587	505,070	4,975,186		
AVG BAL		0.00	1,419.90	1,539.42	1,765.65	1,615.41	1,575.48	1,557.32	1,561.72	1,927.75	1,616.37		
PCT / TOTAL		0.00	0.75	1.40	1.34	1.77	1.50	1.26	1.19	1.21	1.35		
4+CYCLE TOTAL BAL		0	43,032	119,018	412,249	1,644,448	848,645	1,041,514	1,229,098	448,874	5,786,881		
AVG BAL		0.00	1,870.96	1,859.66	1,944.57	1,779.71	1,728.40	1,824.02	1,738.47	1,862.55	1,789.94		
PCT / TOTAL		0.00	0.28	1.75	1.81	2.18	1.79	1.57	1.37	1.07	1.57		
TOTAL NEW CHARGEOFF :		0	12,223	9,950	56,474	154,331	62,757	86,443	161,051	95,181	638,414		
BANKRUPT TOTAL		11,244	3,908	4,490	9,418	5,920	3,938	4,557	3,195	18,457	65,130		
FRAUD		0	2,261	24,326	116,979	436,822	201,052	256,767	402,640	248,594	1,689,446		
OTHERS		3,118	16,780	13,359	71,567	171,545	106,268	112,311	146,795	68,181	704,128		
TOTAL NEW CLOSED :		3,719	58,530	52,252	160,766	516,070	305,131	246,087	388,515	158,343	1,889,418		
VOLUNTARY CLOSED													
OTHER CLOSED													

Figure 4: The Strategy Performance Report By SPID, Digit Group and Behavior Score report, second page.

## Field Reference for Page 2

The second page of a Strategy Performance report divides account balances and counts into two broad categories: merchandise and cash purchases. Within each category, the balances are summarized by delinquency level. Balances are provided for new charge-off accounts and new closed accounts. The fields that comprise each of these areas are described in table 3.

Table 3: Fields in page 2 of the Strategy Performance report.

Merchandise Balance Summary	Title of section summarizing balances by activity status and delinquency level. Balances are expressed in units as indicated in parentheses; for example (000) means multiply the number by 1000. This section is calculated using current month billed balance minus current month billed cash balance. The difference is the merchandise balance.
Total Bal (000)	Total merchandise balance of accounts. The balance includes active, inactive, current cycle charge-offs, and current-cycle closed balances. Avg Bal = Average merchandise balance of accounts in each range.
Current Bal (000)	Current merchandise balance of accounts in each range. Avg Bal = Average merchandise balance for non-delinquent accounts. Pct/Total = Percent of total merchandise balance represented by non-delinquent accounts.
1 Cycle Total Bal	Total merchandise balance of 1-cycle delinquent accounts. Avg Bal = Average balance of 1-cycle delinquent accounts. Pct/Total = Percent of total merchandise balance represented by 1-cycle accounts.
2 Cycle Total Bal	Total merchandise balance of 2-cycle delinquent accounts. Avg Bal = Average balance of 2-cycle delinquent accounts. Pct/Total = Percent of total merchandise balance represented by 2-cycle accounts.
3 Cycle Total Bal	Total merchandise balance of 3-cycle delinquent accounts. Avg Bal = Average balance of 3-cycle delinquent accounts. Pct/Total = Percent of total merchandise balance represented by 3-cycle accounts.
4+ cycle Total Bal	Total merchandise balance of 4+ cycle delinquent accounts. Avg Bal = Average balance represented by 4+ cycle accounts. Pct/Total = Percent of total merchandise balance represented by 4+ cycle accounts.
Total New Charge-off	Title of section summarizing merchandise balances charged-off this cycle. This amount includes charge-off balances due to bankruptcy, fraud, and other reasons.
Bankrupt	Total merchandise balance charged-off due to bankruptcy.
Fraud	Total merchandise balance charged-off due to fraud.
Others	Total merchandise balance charged-off due to reasons other than bankruptcy or fraud.
Total New Closed	Total merchandise balance of accounts closed this cycle.
Voluntary Closed	Total merchandise balance of accounts closed voluntarily this cycle.

Table 3: Fields in page 2 of the Strategy Performance report. (continued)

Other Closed	Total merchandise balance of accounts closed this cycle for reasons other than voluntary closure.
Cash Balance Summary	Title of section summarizing cash balance data by activity status and delinquency level. Balances are expressed in units as indicated in parentheses; for example (000) means multiply the number by 1000.
Total Bal (000)	Total cash balance of accounts in each range. The balance includes active, inactive, current cycle charge-off, and current-cycle closed balances. Avg Bal = Average cash balance of accounts in each range.
Current Bal (000)	Current cash balance of accounts in each range.
1 Cycle Total Bal	Total cash balance of 1-cycle delinquent accounts. Avg Bal = Average cash balance of 1-cycle delinquent accounts. Pct/Total = Percent of total cash balance represented by 1-cycle accounts.
2 Cycle Total Bal	Total cash balance of 2-cycle delinquent accounts. Avg Bal = Average cash balance of 2-cycle delinquent accounts. Pct/Total = Percent of total cash balance represented by 2-cycle accounts.
3 Cycle Total Bal	Total cash balance of 3-cycle delinquent accounts. Avg Bal = Average cash balance of 3-cycle delinquent accounts. Pct/Total = Percent of total cash balance represented by 3-cycle accounts.
4 + Cycle Total Bal	Total cash balance of 4+ cycle delinquent accounts. Avg Bal = Average cash balance of 4+ cycle delinquent accounts. Pct/Total = Percent of total cash balance represented by 4+ cycle accounts.
Total New Charge-off	Total cash balance of accounts charged-off this cycle
Bankrupt Total	Total cash balance of accounts charged-off this cycle due to bankruptcy.
Fraud Total	Total cash balance of accounts charged-off this cycle due to fraud.
Others Total	Total cash balance of accounts charged-off this cycle due to reasons other than bankruptcy or fraud.
Total New Closed	Title of section summarizing data about accounts closed this cycle.
Voluntary Closed	Total cash balance of accounts closed voluntarily this cycle.
Other Closed	Total cash balance of accounts closed this cycle for reasons other than voluntary closure.

## The Report: Third Page

The third page of a Strategy Performance report contains delinquency rollover rates and balances, sales and payment data, credit line utilization and exposure data, fee data, behavior score data, average balance/performance ratios (cleverness indices), and profit and risk numbers.

All balances are derived from statement balances. Balances are shown as factored; for example, Total Exposure (000), should be multiplied by the factor in parentheses. In the case of Total Exposure (000), multiply by 1000 for the full amount.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO :	3
REPORT ID : TRDCGPP-01-V5.0		STRATEGY PERFORMANCE REPORT										RUN DATE :	08/02/1997
		BY SPID, DIGIT GROUP AND TIME ON BOOKS										RUN TIME :	23:39:52
		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997											
STRATEGIC PORTFOLIO ID : --												SPID NAME :	
DIGIT GROUP												REGULAR	
		TIME ON BOOKS ( IN MONTHS )											
		000-005	006-011	012-017	018-023	024-029	030-035	036-047	048-059	060-999	TOTAL		
DELINQUENCY ROLLOVER :													
CURRENT/1 CYCLE ACCTS	1,132	2,401	1,917	3,158	1,917	1,599	2,854	3,176	19,016	37,170			
BAL	1,309,863	3,004,535	2,107,529	4,188,258	2,287,409	2,018,795	3,402,469	3,864,221	29,755,653	51,938,736			
1 CYCLE/2 CYCLE ACCTS	14	83	118	265	205	181	341	383	2,179	1,769			
BAL	18,452	145,522	167,042	396,343	269,883	248,255	416,858	468,341	3,346,189	5,476,890			
2 CYCLE/3 CYCLE ACCTS	14	104	105	149	87	103	132	153	603	1,450			
BAL	22,268	163,015	116,820	223,131	126,965	134,867	160,865	193,055	909,345	2,050,336			
3 CYCLE/4 CYCLE ACCTS	2	64	75	109	63	67	102	118	415	1,015			
BAL	3,213	113,159	108,994	160,248	78,104	99,456	132,730	157,394	704,184	1,557,485			
SALES / PAYMENTS :													
ACCTS WITH DEBITS	14,439	14,886	8,855	14,582	9,047	8,618	16,300	15,700	153,263	255,690			
CASH SALES	1,109,189	454,538	268,778	467,622	279,675	242,646	445,271	403,263	3,990,446	7,661,431			
MERCHANDISE SALES	5,119,243	3,512,349	2,250,169	3,203,127	2,253,920	2,035,971	3,951,886	4,045,455	49,507,732	75,879,856			
AVG TOTAL SALES	431.36	266.48	284.47	251.73	280.05	264.40	269.76	283.36	349.06	326.73			
TOTAL PAYMENTS	2,260,970	3,990,075	2,640,948	4,252,685	2,877,121	2,643,245	5,065,893	4,619,406	56,035,994	84,386,341			
PAYMENT / BALANCE	19.18	20.88	20.72	15.93	20.45	20.49	21.56	19.34	24.00	22.31			
NON-PAYMENT CREDITS	217,008	221,938	136,855	186,970	130,608	115,570	232,235	238,323	3,225,363	4,704,874			
FINANCE CHARGES	99,547	254,327	164,763	354,908	184,250	172,198	908,598	309,929	2,985,955	4,834,480			
CREDIT LINE :													
ACCTS WITH LINES	27,065	29,754	16,996	31,356	18,251	17,735	33,465	31,239	272,146	478,007			
CASH EXPOSURE (000)	64,351	63,177	33,025	61,928	39,478	37,932	81,004	84,180	1,104,671	1,571,751			
TOTAL EXPOSURE (000)	64,351	63,578	33,918	64,735	40,446	38,304	82,447	85,594	1,113,690	1,587,067			
AVG CREDIT LINE	2,377.68	2,136.80	1,995.67	2,064.54	2,216.11	2,159.81	2,463.70	2,739.97	4,092.25	3,320.18			
ACTIVE EXPOSURE (000)	37,437	42,559	26,902	48,554	30,716	27,022	57,275	60,442	807,292	1,138,202			
PCT UTILIZED	31.49	44.79	47.22	54.78	45.67	47.62	40.91	39.39	28.86	33.15			
OVERLIMIT ACCTS	952	2,312	1,932	3,738	2,056	1,800	2,918	2,876	13,601	32,105			
ACCTS OVER PCT	3.52	7.77	11.37	11.92	11.27	10.15	8.72	9.21	5.00	6.73			
TOTAL AMT OVERLIMIT	98,879	233,377	204,641	436,783	256,398	225,001	375,035	402,260	2,504,604	4,736,981			
AVG AMT OVERLIMIT	103.86	100.94	105.92	116.85	124.71	125.00	128.52	139.87	184.15	147.18			
OVLN AMT/OVLN BAL(%)	6.07	5.78	6.45	6.40	6.89	6.78	6.58	6.76	6.07	6.27			
FEE DATA :													
ANNUAL FEES	1,585	220	40,530	900	28,321	691	21,755	21,164	98,929	214,097			
LATE CHARGES	18,597	9,843	5,704	8,915	4,935	4,686	8,070	7,006	53,403	121,163			
CASH FEES	12,436	31,024	26,296	40,230	29,086	25,228	45,200	48,916	313,594	580,810			
MISCELLANEOUS FEES	9,990	26,325	21,835	42,960	22,840	19,845	32,875	31,725	146,867	355,262			
BEHAVIOR SCORE DATA :													
ACCOUNTS SCORED	13,534	26,339	16,555	31,408	18,309	17,988	33,894	32,389	279,395	469,811			
AVG SCORE	662.22	645.65	647.51	643.12	652.17	655.25	659.35	659.28	692.18	676.24			
AVG BAL PERF RATIO :													
1 CYCLE/CURRENT	1.71	1.59	1.40	1.43	1.46	1.56	1.51	1.46	1.64	1.56			
2 CYCLE/CURRENT	1.94	2.28	1.84	1.63	1.65	1.70	1.62	1.55	1.62	1.65			
3 CYCLE/CURRENT	2.42	2.01	1.42	1.69	1.78	1.65	1.67	1.54	1.69	1.65			
4+CYCLE/CURRENT	2.36	2.05	1.80	1.62	1.66	1.99	1.72	1.72	1.88	1.79			
PROFIT / RISK :													
ESTIMATED PROFIT	109,007	169,512	150,426	217,552	151,116	119,662	215,880	223,519	2,170,251	3,526,923			
EST. PROFIT / ACCT	3.90	5.43	7.79	5.35	6.25	4.44	4.08	4.08	4.28	4.51			
EST. PROFIT / ACTIVE	6.60	7.82	10.29	8.40	9.79	8.47	8.10	8.65	9.93	9.30			
BALG RISK/RECEIVABLE	24.90	8.46	9.86	10.05	9.96	10.99	9.48	9.43	5.12	7.34			

Figure 5: The Strategy Performance Report By SPID, Digit Group and Time on Books report, third page.

TRIAD DEMO SYSTEM REPORT ID : TRDCGPF-02-V5.0		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE STRATEGY PERFORMANCE REPORT BY SPID, DIGIT GROUP AND BEHAVIOR SCORE REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										PAGE NO : 3 RUN DATE : 08/02/1997 RUN TIME : 23:39:52	
STRATEGIC PORTFOLIO ID : DIGIT GROUP : 00-99		SPID NAME : REGULAR											
UNSCORED		100-215	216-299	300-650	651-683	684-708	709-726	727-747	748-999	TOTAL			
DELINQUENCY ROLLOVER :													
CURRENT/1 CYCLE ACCTS	2,772	82	211	23,560	4,312	2,792	1,672	1,035	734	37,170			
BAL	2,952,924	123,477	172,322	38,062,342	5,580,292	2,657,239	1,239,704	736,538	414,522	51,938,736			
1 CYCLE/2 CYCLE ACCTS	54	88	197	3,333	60	23	11	2	1	3,769			
BAL	75,235	115,660	173,705	4,968,132	114,594	17,506	11,426	554	75	5,476,890			
2 CYCLE/3 CYCLE ACCTS	90	53	84	1,148	37	23	7	5	3	1,450			
BAL	104,370	96,335	72,841	1,709,540	37,259	12,892	7,642	2,307	7,162	2,050,336			
3 CYCLE/4 CYCLE ACCTS	16	57	108	783	18	9	2	2	0	1,015			
BAL	59,634	82,323	102,822	1,254,461	37,999	11,563	3,571	5,110	0	1,557,485			
SALES / PAYMENTS :													
ACCTS WITH DEBITS	24,544	28	41	53,311	31,464	33,758	35,641	36,344	40,559	255,690			
CASH SALES	1,400,545	2,159	2,236	2,729,133	1,404,350	1,029,870	530,758	344,602	217,694	7,661,431			
MERCHANDISE SALES	7,416,640	2,056	11,446	11,237,721	8,237,487	10,363,724	11,877,104	14,278,935	12,453,939	75,879,856			
AVG TOTAL SALES	359.24	179.16	333.74	261.99	306.44	337.51	348.13	402.37	312.42	326.73			
TOTAL PAYMENTS	4,668,519	71,157	92,246	16,453,153	9,764,575	11,306,007	12,718,282	15,336,101	13,976,296	84,386,341			
PAYMENT / BALANCE	21.19	4.09	5.72	8.51	15.32	27.99	58.24	81.19	96.03	22.31			
NON-PAYMENT CREDITS	356,348	2,957	563	457,373	496,757	592,202	746,058	1,030,080	822,532	4,704,874			
FINANCE CHARGES	231,298	23,724	22,832	2,719,277	882,897	520,777	217,660	138,239	7,765	4,034,480			
CREDIT LINE :													
ACCTS WITH LINES	55,619	8	176	118,612	58,266	64,324	62,316	56,460	62,150	478,007			
CASH EXPOSURE (000)	129,841	155	336	290,841	174,880	214,222	224,248	241,129	296,096	1,571,751			
TOTAL EXPOSURE (000)	130,002	155	338	292,959	177,353	217,496	227,508	243,249	297,982	1,587,067			
AVG CREDIT LINE	2,337.74	1,852.38	1,922.73	2,469.90	3,043.86	3,381.27	3,650.88	4,308.35	4,794.57	3,320.18			
ACTIVE EXPOSURE(000)	65,222	138	263	258,796	144,905	151,503	147,243	167,413	202,716	1,138,202			
PCT UTILIZED	33.71	1,174.49	591.49	74.49	43.95	26.66	14.83	11.28	7.18	33.15			
OVERLIMIT ACCTS	2,213	47	44	25,634	3,038	844	244	98	23	32,185			
ACCTS OVER PCT	3.98	55.95	25.00	21.61	5.21	1.31	0.39	0.17	0.04	6.73			
TOTAL AMT OVERLIMIT	226,164	7,940	5,396	3,842,117	455,635	136,045	42,239	16,974	4,467	4,736,981			
AVG AMT OVERLIMIT	102.20	168.94	122.66	149.88	149.98	161.19	173.11	173.21	194.23	147.18			
OVLM AMT/OVLM BAL(%)	6.08	8.74	8.50	6.40	5.51	5.68	6.16	5.73	5.05	6.27			
FEE DATA :													
ANNUAL FEES	5,303	62	95	76,018	38,039	39,214	30,111	20,031	5,222	214,097			
LATE CHARGES	24,833	45	51	49,094	21,173	13,071	7,122	3,773	1,998	121,163			
CASH FEES	33,224	9,614	15,378	407,642	48,384	30,366	17,806	10,854	7,542	580,810			
MISCELLANEOUS FEES	24,325	3,210	1,310	281,697	31,385	9,025	2,780	1,185	345	355,262			
BEHAVIOR SCORE DATA :													
ACCOUNTS SCORED	34,631	545	1,064	129,850	50,992	64,111	261,827	56,579	62,210	469,811			
AVG SCORE	663.72	493.51	505.29	606.06	668.62	693.37	710.70	727.82	742.66	676.24			
AVG BAL PERF RATIO :													
1 CYCLE/CURRENT	1.66	1.11	1.09	1.09	1.02	1.10	1.46	1.54	1.69	1.56			
2 CYCLE/CURRENT	2.23	1.12	1.21	1.03	1.46	0.98	2.04	0.60	0.23	1.65			
3 CYCLE/CURRENT	1.87	1.49	1.31	1.06	0.80	0.91	2.14	0.99	7.15	1.65			
4 CYCLE/CURRENT	2.45	1.33	1.59	1.14	1.73	1.38	2.04	5.51	0.53	1.79			
PROFIT / RISK :													
ESTIMATED PROFIT	164,498	-87,058	-24,868	1,925,739	691,631	431,504	204,580	158,911	61,985	3,526,923			
EST. PROFIT / ACCT	0.52	-69.76	-12.83	13.46	10.93	6.17	3.10	2.72	0.98	4.51			
EST. PROFIT / ACTIVE	5.19	-81.98	-15.63	15.55	13.93	9.36	4.85	3.96	1.44	9.30			
BAL. RISK/RECEIVABLE	16.63	76.94	69.19	10.73	1.10	0.51	0.33	0.13	0.08	7.34			

Figure 6: The Strategy Performance Report By SPID, Digit Group and Behavior Score report, third page.

## Field Reference for Page 3

The third page of a Strategy Performance report divides account balances and counts into the following six categories: Delinquency Rollover, Sales/Payments, Credit Line, Fee Data, Behavior Score Data, and Profit/Risk. The fields that comprise each of these areas are described in table 4.

Table 4: Fields in page 3 of the Strategy Performance report.

Delinquency Rollover	Title of section summarizing delinquency transition activity.
Current/ 1-Cycle Accounts	Total number of accounts that were current during the previous billing cycle and progressed to 1-cycle delinquent as of this cycle. Bal = Total balance of the accounts that were current during the previous billing cycle and progressed to 1-cycle delinquent as of this cycle.
1-Cycle/2-Cycle Accounts	Total number of accounts that were 1-cycle during the previous billing cycle and progressed to 2-cycles delinquent as of the current cycle. Bal = Total balance of the accounts that were 1-cycle during the previous billing cycle and progressed to 2-cycle delinquent as of the current cycle.
2-Cycle/3-Cycle Accounts	Total number of accounts that were 2-cycles during the previous billing cycle and progressed to 3-cycles delinquent as of the current cycle. Bal = Total balance of the accounts that were 2-cycles during the previous billing cycle and progressed to 3-cycles delinquent as of the current cycle.
3-Cycle/4-Cycle Accounts	Total number of accounts that were 3-cycles during the previous billing cycle and progressed to 4 cycles delinquent as of the current cycle. Bal = Total balance of the accounts that were 3-cycles during the previous billing cycle and progressed to 4-cycles delinquent as of the current cycle.
Sales/Payments	Summarizes sales and payment information for the cycle.
Accounts with Debit	Total number of accounts with debit activity shown on the statement.
Cash Sales	Total amount of cash advances shown on the statement.
Merchandise Sales	Total amount of merchandise sales shown on the statement.
Avg Total Sales	Average sales (merchandise and cash) shown on the statement.
Total Payments	Total amount of payments posted on the statement.
Payment/Balance	Ratio of payments to previous balance on the statement.
Non-Payment Credits	Total amount of non-payment credits shown on the statement.
Finance Charges	Total amount of finance charges shown on the statement.

Table 4: Fields in page 3 of the Strategy Performance report. (continued)

Credit Line	Title of section summarizing credit limit exposure. Balances are expressed in currency units as indicated in parentheses; for example (000) means multiply the number by 1000.
Accounts with Lines	Total number of open accounts with a non-zero credit line.
Cash Exposure (000)	Total cash lines of open accounts.
Total Exposure (000)	Total exposure (cash and merchandise) of open accounts.
Avg Credit Line	Average credit line of open accounts.
Active Exposure (000)	Total exposure of active accounts.
Pct Utilized	Percent of available credit used by active accounts.
Overlimit Accts	Total number of accounts over credit limit as of the statement.
Accounts Over Pct	Percent of accounts with a non-zero credit line who are over their credit limit as of the statement.
Total Amount Overlimit	Total balance exceeding credit line of overlimit accounts as of the statement.
Average Amount Overlimit	Average overlimit amount of overlimit accounts.
Overlimit Amount/Overlimit Balance (%)	Percent of total account balance that the overlimit balance represents for overlimit accounts.
Fee Data	Title of section summarizing the fee revenue being tracked. Selected fees are tracked in this report. Fee labels are set in the System Control table in the TMS. Your labels may vary from the examples shown.
Annual Fees	Total amount of annual fees billed.
Late Fees	Total amount of late fees billed.
Cash Fees	Total amount of cash fees billed.
Misc Fees	Total amount of miscellaneous fees billed.
Behavior Score Data	Title of section summarizing behavior score data.
Accounts Scored	Total number of scored and retained accounts this cycle.
Average Score	Average behavior score for accounts within each range.
Average Balance Performance Ratio	Average Balance by Performance Ratios, also known as cleverness indices. The lower the ratio, the better the strategies are performing.
1 Cycle/Current	Ratio of the average statement balance of 1-cycle accounts to the average balance of current accounts.
2 Cycle/Current	Ratio of the average statement balance of 2-cycle accounts to the average balance of current accounts.
3 Cycle/Current	Ratio of the average statement balance of 3-cycle accounts to the average balance of current accounts.



Table 4: Fields in page 3 of the Strategy Performance report. (continued)

4 + Cycle/Current	Ratio of the average statement balance of 4+ cycle accounts to the average balance of current accounts.
Profit/Risk	Title of section summarizing profit and risk numbers.
Estimated Profit	<p>Estimated profit contribution of accounts in each range For example:</p> <p>Estimated Profit = (Net Interchange Fees + Fees + Interest) minus (Cost of Funds + Net Credit Loss + Collection Expense + Delivery Expense)</p> <p>The calculation may be modified for your installation. See the <i>TRIAD Project Guide</i> for your profit calculation.</p>
Estimated Profit/Account	Estimated profit contribution per account in each time-on-books or behavior score range.
Estimated Profit/Active	Estimated profit contribution per active account in each time-on-books or behavior score range.
Balance@Risk/ Receivable	Ratio of the balance-at-risk to the total balance for non-charged-off accounts by range. All unscored accounts have their entire balance included in the balance-at-risk.



## 7: Credit Line Management

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### About the Credit Line Management Decision Area

The Credit Line Management decision area, also known as Credit Line, determines changes in credit and cash lines. Every account has the potential for a credit or cash limit review at cycle. The review can result in an increase or decrease in the line. A series of timing triggers control when an account is eligible for an increase. Decreases are caused by a customer's behavior. They are not bound by timing parameters and can occur at any cycle.

TRIAD generates reports that analyze credit and cash limits in terms of account behavior, line utilization, and actions taken. These reports are based on information in the Report Record file, a repository containing all actions taken. The Credit Line Estimator produces reports that show how a sample group of accounts will react to the strategies currently under development.

Table 1: Components of the Credit Line decision area.

Configuring Options	Configure Credit Line processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Credit Line decision area.
Trigger Events	Determine timing for Credit Line reviews.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Decreasing a Non-Delinquent Account	Decreases the credit limit of a non-delinquent account.
Outcomes Reporting	Tallies and reports actions taken during the month.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

The fields shown in table 2 let you configure the Credit Line decision area for your installation. You update the fields using the TMS. For a description of their valid values, see the *Advanced Features* chapter in the *TRIAD Table Maintenance Guide*.

Table 2: Configuring Options in the Credit Line decision area.

Field Name	Table	Description
Credit Line No Change Letter Indicator	Client Parameters	Tells TRIAD how letters should be used when a No Movement (Allowable Movement = N) credit line or cash line action is specified.
Credit Line Decrease Indicator	Client Parameters	Determines which filter or filters will be used to identify non-delinquent accounts for a credit line decrease review.
Credit Line Decrease CB Score Filter	Client Parameters	Sets a credit bureau score cutoff value for a credit line decrease review. If a non-delinquent account has a score equal to or less than this value, it may be reviewed for a credit line decrease.
Credit Line Increase Rounding Method	Client Parameters	Indicates which rounding method will be used when a credit line increase is calculated.
Credit Line Decrease Rounding Method	Client Parameters	Indicates which rounding method will be used when a credit line decrease is calculated.
Cash Line Increase Rounding Method	Client Parameters	Indicates which rounding method will be used when a cash line increase is calculated.
Cash Line Decrease Rounding Method	Client Parameters	Indicates which rounding method will be used when a cash line decrease is calculated.
Credit Line Decrease Behavior Score Filter	Client Parameters	Sets a behavior score cutoff value for a credit line decrease review. If a non-delinquent account has a score equal to or less than this value, it may be reviewed for a credit line decrease.
Credit Bureau Score Age Cutoff	Client Parameters	Provides the maximum age (in months) of the credit bureau score. Scores older than the value in this field are not recognized by TRIAD.

Table 2: Configuring Options in the Credit Line decision area. (continued)

Field Name	Table	Description
Cash Line Reporting Indicator	System Control	Controls how cash lines are reported: <ul style="list-style-type: none"> <li>• If there are no separate cash lines or cash balances, cash line reports can be suppressed.</li> <li>• If there are cash balances, but not separate cash lines, cash balances can be reported using the credit line.</li> <li>• If there are cash lines and cash balances, the cash line reporting can use them.</li> </ul>
Cash Line Process Indicator	System Control	Signals TRIAD to use separate cash line and cash balances, when they are available, in both the Overlimit Collections and Credit Line decision areas.
CB Attribute Cutoff	SPID Control	The four codified cutoff attributes each corresponding to a specific type of ScoreNet® credit bureau information: <ul style="list-style-type: none"> <li>• Worst public record</li> <li>• Worst trade line reference</li> <li>• Number of trade lines</li> <li>• Number of disputed trade lines</li> </ul> If the cutoff value for the SPID is equal to or greater than the value in the cutoff attribute, the account is excluded automatically from credit line increase.

## Exclusions

You can exclude categories of accounts from credit line processing. For example, bankrupt accounts are typically excluded from both increase and decrease. An account excluded from credit line processing is excluded from cash line processing automatically. Accounts can be excluded from a credit line increase or decrease as follows:

- If an account is excluded from increase, it does not get an increase but may get a decrease.
- If an account is excluded from decrease, it does not get a decrease but may get an increase.

The exclusion decisions are made in design meetings with your Fair, Isaac representative.

Exclusions in each decision area are for that area only. An account may be excluded from Credit Line, but processed in other areas such as Delinquent Collections or Authorizations. Non-scored accounts may also be treated in the decision area.

The Credit Bureau (CB) Attribute Cutoff Values are another type of Credit Line exclusion. If they are greater than the attribute values in each account record, the account is automatically excluded from credit and cash line increases. Each attribute corresponds to specific data for ScoreNet®. ScoreNet is a Fair, Isaac product that provides account-level information from the major North American credit bureaus.

Four ScoreNet attributes are available to TRIAD processing. They are:

Attribute 1:	Worst public record
Attribute 2:	Worst trade line reference
Attribute 3:	Number of trade lines
Attribute 4:	Number of disputed trade lines

The Credit Bureau Attribute Cutoff Values fields reside in the SPID Control table. For more information see the *TRIAD Table Maintenance Guide*.

## Triggers

Timing fields in the Credit Line Parameters table (see figure 1) are the primary Credit Line triggers. As shown in the figure below, they are linked to a specific Strategy ID. This gives you the flexibility of selecting a unique set of timing fields for each strategy.

The screenshot shows a software window titled "Credit Line Parameters". At the top, there is a field for "Environment Name" with the value "TEST". Below this is a "Strategy ID" field with a dropdown menu showing "1" and a text field containing "DEMO CREDIT LINE STRATEGY". To the right of the text field is a "Clear" button. Below the strategy information is a section titled "Credit Line Triggers" containing five input fields: "Target Month" (99), "Fee Interval" (99), "Minimum Months Since Increase" (99), "Minimum Interval" (12), and "Review Interval" (12). Below this is another section titled "Credit Line Parameters" containing six input fields: "Maximum Increase" (0001000), "Minimum Increase" (0000500), "Credit Line Increase Rounding Factor" (0100), "Credit Line Decrease Rounding Factor" (0100), "Cash Line Increase Rounding Factor" (0100), and "Cash Line Decrease Rounding Factor" (0100).

Figure 1: Trigger event fields in the Credit Line Parameters table.

## Primary Triggers

When an account passes a trigger test, it qualifies for a credit limit review. Once it qualifies, no further triggers are tested. The order for testing from first to last is:

- Target Month
- Fee Interval
- Minimum Months Since Increase
- Minimum Interval (regular review time)
- Review Interval

The triggers are described in table 3 on page 114.

Table 3: Credit Line Triggers.

Target Month	Links a credit line increase review to a month. For example, to review all accounts in a digit group in November, enter 11. To bypass this review, set to 99.
Fee Interval	Defines the number of months before annual fee assessment that an account is reviewed for a credit line increase. For example, if the interval is set to one, the account is reviewed one month prior to fee assessment. If the interval is set to zero, it is reviewed the month the fee is assessed. This number must be positive. To bypass this review, set to 99.
Minimum Months Since Increase	Sets the minimum number of months that must pass between the last credit line increase and a target month or annual fee credit line review. If the Minimum Months Since Increase has not passed, the account will not be evaluated even if it qualifies based on Target Month or Fee Interval. To bypass this review, set to 99.
Minimum Interval	Defines the number of months that must pass between the last credit line increase and the next time the account can be considered for a regularly-scheduled credit line increase review. For example, if the Minimum Interval is set to 6, accounts will be reviewed every six months for their next increase. To bypass this review, set to 99.
Review Interval	Defines the number of months that must pass between a failed increase review and the next increase review. It is used with the Minimum Interval. For example, if the Minimum Interval is set to six and the Review Interval is set to two, the account will be examined every six months for a regularly-scheduled increase review. If an account's credit line is not increased at the six month review, it will be reviewed every two months thereafter until it does receive an increase. Then, it reverts back to the Minimum Interval schedule. To bypass this review, set to 99.



## Credit Line Management Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. Strategy trees are built in the TMS.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

### Table and Tree

A Credit Line Strategy table has three parts: Strategy ID, the key fields, and scenarios.

- Strategy IDs link a set of strategy keys to its corresponding strategy table.
- Strategy table keys define the conditions under which an account is assigned to a particular scenario.
- Scenarios define treatments applied to the account.

Whether you view your Credit Line strategy in table format, as shown in figure 2 on page 116, or in tree format, as shown in figure 3 on page 116, you will see a one-to-one correspondence between each row of the strategy table and each branch of the strategy tree. Both the rows and branches have key values and a resulting action.

SCEN ID	CYCLES DELQ	TIME ON BOOKS	CREDIT LINE	SCENED IT CENE UTIL	BEHAVR SCORE
001	0	000000	000000	000000	000000
001	2	000001	000000	000000	000000
001	2	000002	000000	000000	000000
001	2	000002	000012	000000	000000
001	2	000002	000012	000000	000010
009	2	000002	000012	000010	000010
010	2	000002	000012	000010	000010
001	2	000002	000012	000010	000010
001	2	000002	000012	000010	000010
001	2	000002	000012	000010	000010
009	2	000002	000012	000010	000010
010	2	000002	000012	000010	000010
001	2	000002	000012	000010	000010
010	2	000002	000012	000010	000010

Figure 2: The Credit Line Strategy table.

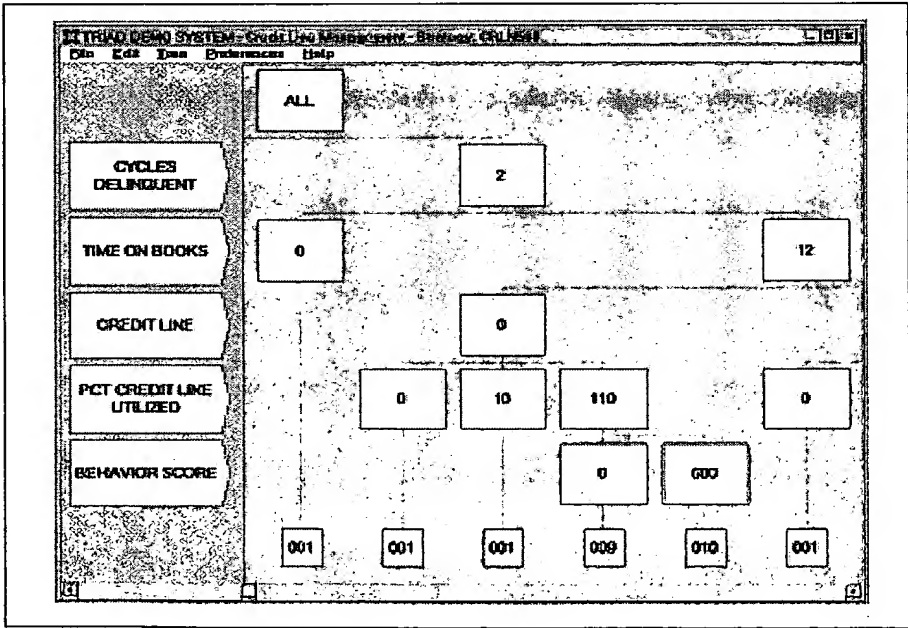


Figure 3: The Credit Line Strategy tree.

## Sample Strategy Keys

The keys described in this section (see table 4) are often used in the Credit Line treatment area. Keys are defined during the design meetings with your Fair, Isaac representative. Consequently, those described in this section may differ from those in your installation. Consult the *TRIAD Project Guide* for a description of keys used in your Credit Line implementation.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among Credit Line strategies. You can select up to fifteen keys from the strategy key library. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative.

Table 4: Frequently Used Credit Line Strategy keys.

Cycles Delinquent	Number of cycles the account is delinquent.
Time-on-Books	Number of months the account has been open.
Months Since Active	Number of months since the most recent monetary activity on the account. If the account is currently active, this field is zero.
%Credit Line Used	Current balance as a percent of credit line.
%Cash Line Used	Current cash balance as a percent of credit line.
Credit Line	Account's current credit line.
Behavior Score	Account's behavior score.
Credit Bureau Score	Account's credit bureau score.

## Credit Line Management Scenarios

As part of a scenario, you can increase or decrease a credit line on an account, or you can take no action. To receive a credit line increase, an account must first qualify based on the triggers in the Credit Line Parameters table. An increase scenario in the Credit Line Strategy table points to a scenario containing the increase algorithm. Decrease reviews can occur at any cycle; they are determined by an account's performance, not by timing criteria. A decrease scenario contains the algorithm for decreasing the account. Both delinquent and non-delinquent accounts can be decreased. Due to federal regulations in the United States, special care must be taken when decreasing non-delinquent accounts. These issues are discussed more in the section *Decreasing a non-Delinquent Account*.

Each Credit Line strategy uses scenarios from the Credit Line Scenario table, which may have up to 999 scenarios. Scenarios are updated using the TRIAD Table Maintenance System. For information about updating scenarios, see the TRIAD Table Maintenance Guide.

Figure 4 shows a Credit Line scenario. Each scenario has a Scenario ID, description, and actions. The Scenario ID is a key identifying the scenario in both the strategy and scenario tables. The description is optional, user-defined text.

Environment Name: TEST

Scenario ID: 002

Description: Test Credit Line Scenario 002

Action	Fixed Line Amt	Fixed Inc Amt	Credit Line Multiplier	Review Balance Multiplier	High Balance Multiplier	Medium Credit Line	Minimum Credit Line
Credit: 1	0001200	0000000	0.00	0.00	0.00	0002000	0000200
Credit: 0	0000000		0.25			0001000	

Returned Values

Statement Message: 02

Letter: 102

Month Overdue Fee Waiver: 06

Page 1 of 5

Figure 4: The Credit Line Scenario table.

A Credit Line Scenario may have three types of actions:

- Review a credit or cash line for a potential increase or decrease
- Notify the customer with a letter or a statement message
- Waive an overlimit fee on an account whose credit line has been decreased

## Action One: Changing a Credit Line

Increasing or decreasing a credit line is a four-step process:

- |               |   |
|---------------|---|
| <b>Step 1</b> | Calculate the new credit line.  |
| <b>Step 2</b> | Round the new credit line.  |
| <b>Step 3</b> | Verify that the increase amount fits within the minimum and maximum amounts specified for the strategy and the new credit line fits within the boundaries prescribed by the scenario. |
| <b>Step 4</b> | Verify that the newly-calculated credit line agrees with the change specified in the Allowed Movement field. The Allowed Movement field is also known as Allowable Movement.          |

### Step One: Calculating the New Limit

The Credit Line Scenario table provides five methods for changing a credit line. All of the methods may be used to increase a credit line. Credit lines may be decreased using a multiplier or a fixed line equal to zero. To decrease a credit line using a multiplier, set the multiplier to a number less than 100.

*Note: Each scenario can use only one of the following methods. Set the unused methods to zero.*

The methods for calculating a new credit line are:

<b>Fixed Credit Line</b>	All accounts treated by the scenario are assigned the same credit limit. For example, everyone treated by this scenario receives a credit limit of £2500.
<b>Incremental Amount</b>	All accounts treated by the scenario have the same amount added to their current credit lines. For example, you could increase each credit line by ¥7500.
<b>Credit Line Multiplier</b>	All accounts treated by the scenario are increased or decreased by a percentage of the current credit line. <ul style="list-style-type: none"> <li>• To increase the current credit line 15%, set this field to 1.15 and Allowable Movement to I.</li> <li>• To decrease the account to 85% of its current line, set this field to 0.85 and Allowable Movement to D.</li> </ul>
<b>Review Balance Multiplier</b>	All accounts treated by the scenario are increased or decreased by a percentage of a current balance derivative, the review balance. <ul style="list-style-type: none"> <li>• To increase the current credit line by 12% of its current balance, set this field to 1.12 and Allowable Movement to I.</li> <li>• To decrease the account to 85% of its review balance, set this field to 0.85 and Allowable Movement to D.</li> </ul>
<b>Highest Lifetime Balance Multiplier</b>	All accounts treated by the scenario are increased or decreased by a percentage of their highest lifetime balance. <ul style="list-style-type: none"> <li>• To increase the current credit line to 10% above the highest lifetime balance, set this field to 1.10 and Allowable Movement to I.</li> <li>• To decrease the account to 90% of its highest lifetime balance, set this field to 0.90 and Allowable Movement to D.</li> </ul>

## Step Two: Rounding the Newly-Calculated Limit

After the new credit line is calculated, it is rounded. Limit increases and decreases are rounded differently depending on the Credit Line Rounding Method setting in the Client Parameters table of the TRIAD Table Maintenance System.

See the Client Parameters table of the TMS for the Rounding Method to be used.

The rounding factor of increase or decrease is entered in the Credit Line Parameters table as shown in figure 5 on page 121.

The screenshot shows a window titled "Credit Line Parameters". At the top, there is a field for "Environment Name" with the value "TEST". Below this, there are fields for "Strategy ID" (102) and "Challenger ID" (102), with a "Reset" button. The window is divided into two main sections: "Credit Line Triggers" and "Credit Line Parameters".

**Credit Line Triggers:**

Target Month	Fee Interval	Minimum Months Since Increase	Minimum Interval	Review Interval
99	99	99	99	99

**Credit Line Parameters:**

Maximum Increase	Minimum Increase	Credit Line Increase Rounding Factor	Credit Line Decrease Rounding Factor	Cash Line Increase Rounding Factor	Cash Line Decrease Rounding Factor
0000000	0000000	0050	0050	0050	0050

Figure 5: Increase and Rounding parameters in the Credit Line Parameters table.

Table 5: Rounding Fields.

Credit Line Increase Rounding Factor	Amount by which the credit line increases are rounded.
Credit Line Decrease Rounding Factor	Amount by which credit line decreases are rounded.
Cash Line Increase Rounding Factor	Amount by which cash line increases are rounded.
Cash Line Decrease Rounding Factor	Amount by which cash line decreases are rounded.

### Step Three: Checking the Increase and Credit Line Amounts

TRIAD makes two types of checks when a credit line has been calculated, the increase amount and the new credit line. Both must fit within user-specified ranges for the change to take effect. The increase amount is checked against amounts specified in Credit Line Parameters. The newly-calculated credit line is checked against amounts in the Credit Line Scenario table.

After a credit line increase has been calculated, TRIAD compares the increase amount to the Minimum and Maximum Increase amounts for the Strategy.

- If the increase amount is less than the Minimum specified in the Credit Line Parameters table, the account does not get an increase.
- If the increase amount is greater than the Maximum, the new credit line is set to the old credit line plus the value of the Maximum Increase parameter.

Next, the newly-calculated credit line is examined. If it is greater than the Maximum Credit Line in the scenario, the new credit line is set to the Maximum Credit Line amount. If it is less than the Minimum Credit Line amount, the new credit line is set to the Minimum Credit Line amount for the scenario.

### Step Four: Checking Allowed Movement

As table 6 shows, a scenario may specify that a credit line should be increased, decreased, not changed, or set to zero. If the Credit Line Allowed Movement indicator has been set to zero, you must also set the Cash Line Allowed Movement Indicator to zero.

Table 6: Allowed Movement.

I	Increase the credit line or cash line.
D	Decrease the credit line or cash line.
N	Allow no change in the line. If you set the Credit Line Allowable Movement to N, the only action you may take is to send a letter. The letter can be sent to delinquent accounts, non-delinquent accounts, or all accounts depending on the setting of the Credit Line No Change Letter Indicator.
Z	Set the line to zero. If you set the Allowable Movement to Z, you must also set the Fixed Credit Line, Incremental Amount, and the three percentage change options to zeros. If the Credit Line Allowable Movement is set to Z, the Cash Line Allowable Movement must also be set to Z.
B	Decrease cash line only. Reduces the cash line to the existing cash balance rounded up to the nearest amount defined in the Decrease Rounding field. For example, if the current cash line is \$100 and the cash balance is \$44.34, the new cash line will be \$50. This option only decreases the cash line. If the current cash balance is already over the cash limit, the cash line is not changed.



## Action Two: Notifying the Customer

You can notify the customer of a credit line change with a message printed on the statement or with a letter. These options (see table 7) represent feeds to your current statement and letter printing systems, respectively.

Table 7: Feeds to Your Statement and Letter Printing Systems.

Statement Message ID	Identifies a message to be printed on the account holder's statement. See the <i>TRIAD Project Guide</i> for specific audit rules for your installation.
Letter ID	Identifies a particular letter from the letter library. See the <i>TRIAD Project Guide</i> for specific audit rules for your installation.

## Action Three: Waiving Overlimit Fees

A credit line decrease can cause a previously under limit account to exceed the new, lower credit limit. The Overlimit Fee Waiver (see table 8) sets the number of months an account will not be charged an overlimit fee after a credit line decrease.

TRIAD does not assess overlimit fees nor does it track the number of months until the fee can be assessed again. Interpretation of these values must be provided by your system. See the *TRIAD Project Guide* for more information about using the Overlimit Fee Waiver counter.

Table 8: Overlimit Fee Waiver Settings.

00	An overlimit fee can be charged (default).
01 to 98	The account is not assessed an overlimit fee for the number of months indicated. For example, to waive the fee for six months, enter 06.
99	The account is not assessed a fee until after it is within the new limit. When the account is within the new limit, reset this field to 00.

## Calculating a New Cash Line

Cash lines can be changed using one of two methods outlined below. The resulting cash line is subject to the Maximum Cash Line and Cash Line Allowed Movement constraints for the scenario.

If the new line exceeds the Maximum Cash Line setting, TRIAD sets the cash line to the maximum setting. If the new cash line exceeds the new credit line setting, TRIAD sets the new cash line to the new credit line. Use only one of the two methods. Set the unused one to zero.

### Fixed Cash Line

Assigns the same cash line to all accounts treated by the scenario. For example, all treated accounts receive a cash line of \$2,000.

### Cash Line Multiplier

Sets the cash line of accounts treated by this scenario to a percentage of the new credit line. For example, to increase the cash line to 50% of the new credit line, set the Cash Line multiplier to 0.50 and Allowable Movement to 1.

## Decreasing a Non-Delinquent Account

You can also develop strategies to decrease the credit limit of non-delinquent accounts. For example, you may want to decrease the credit line of accounts with very high credit lines and low behavior or credit bureau scores, even if the accounts are not delinquent. Be aware that special regulations must be considered when decreasing non-delinquent accounts in the United States. Please consult with your legal department for the exact Fair Credit Reporting Act (FCRA) and Equal Credit Opportunity Act (ECOA) reporting and data storage requirements.

To implement these strategies, you must set a special indicator, the Credit Line Decrease Indicator, that allows TRIAD to decrease the credit lines of non-delinquent accounts (see table 9). Based on the indicator setting, TRIAD implements a filter for selecting which non-delinquent accounts can be decreased. The filters use behavior score, the credit bureau score, or a combination of both scores to determine which accounts are candidates for credit line decrease. The fields involved in the decision (see table 9) can be accessed using the Client Parameters table in the TMS.

Table 9: Fields for Decreasing a Non-Delinquent Account.

Credit Line Decrease Indicator	<p>Determines which filter or filter combination identifies non-delinquent accounts for credit line decrease review.</p> <p>The options are:</p> <ul style="list-style-type: none"> <li>• Do not decrease non-delinquent accounts</li> <li>• Use the behavior score filter only</li> <li>• Use the credit bureau score filter only</li> <li>• Use either the behavior score or credit bureau score filters</li> <li>• Use both the behavior score and credit bureau score filters</li> </ul>
Credit Line Decrease Behavior Score Filter	<p>Provides a cutoff value for behavior scores.</p> <p>Accounts with a behavior score equal to or less than this value will be considered for a credit line decrease, even if they are not delinquent at the time of the review.</p>
Credit Line Decrease Credit Bureau Score Filter	<p>Provides a cutoff value for credit bureau scores.</p> <p>Accounts with a credit bureau score equal to or less than this value will be considered for a credit line decrease, even if they are not delinquent at the time of the review.</p>

## Credit Line Management Outcomes Reporting

Credit Line Cycle Tally reports provide summary and distribution information about accounts. They are produced from data collected at cycle in the Report Record file. By examining the reports, you can see how different strategies affect accounts.

### Production Schedule

Typically, Cycle Tally reports are produced at month-end, although they can be produced weekly. Reports are sorted by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data.

All portfolios are reported in the Cycle Tally Reports except those in SPID 99, which are excluded from TRIAD processing. Likewise, Strategy ID 999 excludes accounts from TRIAD treatment. The excluded accounts are processed by your existing software.

## List of Cycle Tally Reports

There are five Credit Line Cycle Tally reports and five corresponding Cash Line Cycle Tally reports. Throughout the remainder of this section, the Credit Line and corresponding Cash Line Cycle Tally reports are discussed together (although only the credit line version of the report is displayed).

If your installation does not have separate cash lines or does not use separate cash balances, the Cash Line reports can be suppressed. To suppress Cash Line reporting, set the Cash Line Reporting Indicator field in the System Control table to zero. See the *TRIAD Table Maintenance Guide* for instructions about setting this field.

### Credit Line Reports

- Credit Line Outcomes by SPID and Behavior Score
- Credit Line Outcomes by SPID, Digit Group and Scenario
- Credit Line Outcomes by SPID and Digit Group
- Credit Line Distribution by SPID, Digit Group and Behavior Score
- Credit Line Distribution by SPID, Digit Group and Old Credit Line

### Cash Line Reports

- Cash Line Outcomes by SPID and Behavior Score
- Cash Line Outcomes by SPID, Digit Group and Scenario
- Cash Line Outcomes by SPID and Digit Group
- Cash Line Distribution by SPID, Digit Group and Behavior Score
- Cash Line Distribution by SPID, Digit Group and Old Cash Line

## Outcomes by SPID and Behavior Score

The Credit Line Outcomes by SPID and Behavior Score (see figure 6) and the Cash Line Outcomes by SPID and Behavior Score reports monitor the increases, decreases and exposure changes that result from the Credit Line strategies.

The detailed report matrix is the same for both versions of the report. Rows show the behavior score ranges defined in the Report Ranges table of the TRIAD Table Maintenance System. Columns show various categories of exposure change such as increase, decrease, new exposure and old exposure. A description of the fields in both reports is shown in table 10 on page 128.

TRIAD DEMO SYSTEM			TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE						PAGE NO : 33		
REPORT ID: TRDC6LCP-07-V5.0			REPORTING PERIOD - 04/30/1997 THRU 04/30/1997						RUN DATE : 05/01/1997		
									RUN TIME : 10:35:29		
CREDIT LINE OUTCOMES BY SPID AND BEHAVIOR SCORE											
STRATEGIC PORTFOLIO ID: 01 NAME: OLD CLASSIC											
BEHAVIOR SCORE	TOTAL ACCOUNTS	NUMBER EXCLUDED	NOT ELIGIBLE	NUMBER INCREASED	NUMBER DECREASED	NUMBER UNCHANGED	AMOUNT INCREASED	AMOUNT DECREASED	OLD EXPOSURE	NEW EXPOSURE	
000-100	372	292	9	1	0	70	1,000	0	1,545,200	1,546,200	
101-120	5	4	0	0	0	1	0	0	14,400	14,400	
121-140	8	8	0	0	0	0	0	0	17,100	17,100	
141-160	4	4	0	0	0	0	0	0	8,500	8,500	
161-170	1	1	0	0	0	0	0	0	800	800	
171-180	5	4	0	1	0	0	1,000	0	10,800	11,800	
181-200	4	3	0	1	0	0	1,000	0	9,800	10,800	
201-250	7	6	0	1	0	0	1,000	0	21,800	22,800	
251-400	41	38	1	1	0	1	1,000	0	114,700	115,700	
401-420	10	6	1	3	0	0	3,000	0	24,300	27,300	
421-430	4	2	0	2	0	0	2,000	0	8,500	10,500	
431-440	9	4	1	4	0	0	4,000	0	17,500	21,500	
441-450	6	3	0	3	0	0	3,000	0	8,300	11,300	
451-460	6	1	0	5	0	0	5,000	0	16,300	21,300	
461-470	6	4	0	2	0	0	2,000	0	11,100	13,100	
471-480	7	4	1	2	0	0	2,000	0	12,500	14,500	
481-490	12	5	0	7	0	0	7,000	0	25,000	32,000	
491-500	14	2	1	10	0	1	10,000	0	47,500	57,500	
501-510	13	4	1	7	0	1	6,500	0	30,700	37,200	
511-520	10	2	0	7	0	1	6,800	0	32,000	38,800	
521-530	12	5	0	5	0	2	4,800	0	33,600	38,400	
531-540	26	8	3	12	0	3	12,000	0	78,500	90,500	
541-550	13	3	1	8	0	1	8,000	0	32,300	40,300	
551-560	13	4	1	5	0	3	5,000	0	34,900	39,900	
561-570	20	2	4	11	0	3	10,200	0	88,800	99,000	
571-580	31	4	3	16	0	8	14,800	0	136,200	151,000	
581-590	23	2	5	13	0	3	13,000	0	102,000	115,000	
591-600	24	5	3	10	0	6	9,000	0	99,400	108,400	
601-610	22	2	3	9	0	8	9,000	0	101,200	110,200	
611-620	40	8	7	13	0	12	13,000	0	191,100	204,100	
621-630	25	7	6	8	0	4	8,000	0	125,700	133,700	
631-640	76	25	8	14	0	29	14,000	0	480,800	494,800	
641-650	34	10	4	10	0	10	10,000	0	199,000	209,000	
651-660	71	11	19	15	0	26	13,300	0	478,800	492,100	
661-670	56	1	19	17	0	19	17,000	0	371,000	388,000	
671-680	62	5	19	15	0	23	14,500	0	430,500	445,000	
681-690	60	4	8	6	0	42	6,000	0	440,600	446,600	
691-700	37	0	6	5	0	26	5,000	0	294,800	299,800	
701-800	35	18	1	0	0	16	0	0	166,900	166,900	
801-999	47	46	0	1	0	0	1,000	0	95,700	96,700	
TOTAL	1,271	567	135	250	0	319	243,900	0	5,958,800	6,202,700	

Figure 6: The Credit Line Outcomes by SPID and Behavior Score report.

## Field Reference

The headings of both reports, Credit Line Outcomes by SPID and Behavior Score and Cash Line Outcomes by SPID and Behavior Score, contain the Strategic Portfolio ID and Name. The detail fields in the report matrix (see table 10) are identical in both reports.

Table 10: Fields in Reports: Credit Line Outcomes by SPID and Behavior Score and Cash Line Outcomes by SPID and Behavior Score.

Row headings:	
Behavior Score	Most recent aligned behavior score, segmented into ranges. The ranges were set in the Report Ranges table of the TRIAD Table Maintenance System.
Total	Totals of categories across behavior score ranges within the SPID.
Column headings:	
Total Accounts	Total number of accounts in each behavior score range, including unscored accounts.
Number Excluded	Number of accounts in each behavior score range excluded from Credit or Cash Line treatment.
Not Eligible	Number of accounts in each behavior score range not time eligible for a credit or cash line review this cycle. Also includes accounts ineligible as a result of failing the Credit Line Decrease filter (as specified in the TMS) and accounts which met decrease only exclusions as specified in the <i>TRIAD Project Guide</i> .
Number Increased	Number of accounts in each behavior score range with increased credit or cash lines. If there is a number in this field, there should be an amount in the Amount Increased field described below.
Number Decreased	Number of accounts in each behavior score range with decreased credit or cash lines. If there is a number in this field, there should be an amount in the Amount Decreased field described below.
Number Unchanged	Number of accounts in each behavior score range that were reviewed for a credit or cash line change, but were not increased or decreased.
Amount Increased	Total amount of credit or cash line increases on accounts in each behavior score range. If there is an amount in this field, there should be a number in the Number Increased field.
Amount Decreased	Total amount of credit or cash line decreases on accounts in each behavior score range. If there is an amount in this field, there should be a number in the Number Decreased field.
Old Exposure	Total amount of credit or cash lines for all accounts in each behavior score range before this cycle's changes.

Table 10: Fields in Reports: Credit Line Outcomes by SPID and Behavior Score and Cash Line Outcomes by SPID and Behavior Score. (continued)

New Exposure	Total amount of credit or cash lines for all accounts in each behavior score range after this cycle's line changes. The formula for New Exposure= ((Old Exposure - Amount Decreased) + (Amount Increased))
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## Outcomes by SPID, Digit Group and Scenario

The Credit Line Outcomes by SPID, Digit Group, and Scenario (see figure 7) and the Cash Line Outcomes by SPID, Digit Group, and Scenario reports monitor increases, decreases, and exposure changes resulting from each credit line scenario. The detailed report matrix in both reports is identical. Rows list Scenario ID and columns identify various categories of exposure change. A description of the fields in both reports is shown in table 11.

The reports have a separate page for each digit group in a SPID and a page for all digit groups in the SPID. The final page of the report shows all SPIDs. Digit group divisions aren't shown for the combined SPIDs, because the digit groups may vary from SPID to SPID.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE						PAGE NO : 36	
REPORT ID : TRDC6LCP-08-V5.0		REPORTING PERIOD - 04/30/1997 THRU 04/30/1997						RUN DATE : 05/01/1997	
								RUN TIME : 10:35:29	
CREDIT LINE OUTCOMES BY SPID, DIGIT GROUP AND SCENARIO									
STRATEGIC PORTFOLIO ID: 02 NAME: OLD CLASSIC									
DIGIT GROUP : 00 - 09									
SCENARIO	TOTAL	NUMBER	NUMBER	NUMBER	AMOUNT	AMOUNT	OLD	NEW	
ID	ACCOUNTS	INCREASED	DECREASED	UNCHANGED	INCREASED	DECREASED	EXPOSURE	EXPOSURE	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
000	56	0	0	0	0	0	172,200	172,200	
001	8	0	0	8	0	0	47,800	47,800	
013	2	0	0	2	0	0	13,500	13,500	
014	6	0	0	6	0	0	31,300	31,300	
016	19	1	0	18	500	0	143,400	143,900	
017	3	0	0	3	0	0	23,300	23,300	
018	1	1	0	0	1,000	0	1,000	2,000	
021	5	3	0	0	2,100	0	7,000	9,100	
025	26	15	0	2	15,000	0	163,200	178,200	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	126	20	0	39	18,600	0	602,700	621,300	

Figure 7: The Credit Line Outcomes by SPID, Digit Group, and Scenario report.

## Field Reference

The headings of both reports, Credit Line Outcomes by SPID, Behavior Score, and Scenario and Cash Line Outcomes by SPID, Behavior Score, and Scenario, contain the Strategic Portfolio ID and Name. The detail fields in the report matrix (see table 11) are identical in both reports.

Table 11: Fields in Reports: Credit Line Outcomes by SPID, Behavior Score, and Scenario and Cash Line Outcomes by SPID, Behavior Score, and Scenario.

Row headings:	
Scenario ID	Credit Line Scenario. Note: The first row, Scenario ID 000, contains the total number of excluded and not-time-eligible accounts.
Total	Totals of accounts and amounts for all scenarios in this digit group.
Column headings:	
Total Accounts	Total number of accounts that were treated by each scenario.
Number Increased	Number of accounts in each scenario whose credit or cash lines were increased. If there is a number in this field, there should be an amount in the Amount Increased field described below.
Number Decreased	Number of accounts in each scenario whose credit or cash lines were decreased. If there is a number in this field, there should be an amount in the Amount Decreased field described below.
Number Unchanged	The number of accounts in each behavior score range that were reviewed for a credit or cash line change, but were not increased or decreased.
Amount Increased	Total amount of credit or cash line increases on accounts in each scenario. If there is an amount in this field, there should be a number in the Number Increased field described previously.
Amount Decreased	Total amount of credit or cash line decreases on accounts in each scenario. If there is an amount in this field, there should be a number in the Number Decreased field described previously.
Old Exposure	Total amount of credit or cash lines for all accounts in each scenario before this cycle's changes.
New Exposure	Total amount of credit or cash lines for all accounts in each scenario after this cycle's line changes. The formula for New Exposure= ((Old Exposure - Amount Decreased) + (Amount Increased))



## Outcomes by SPID and Digit Group

The Credit Line Outcomes by SPID and Digit Group (see figure 8) and the Cash Line Outcomes by SPID and Digit Group reports monitor increases, decreases, and exposure changes. The detailed report matrix for both reports is identical. Rows list digit group ranges; and columns identify various categories of exposure. Because it is sorted by digit group within SPID, it can be used to compare Champion and Challenger strategies within a SPID.

The report has one page per SPID. The last page totals all SPIDs. A description of the fields in each report is shown in table 12 on page 132.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE							PAGE NO : 43	
REPORT ID : TRDC6LCP-09-V5.0		REPORTING PERIOD - 04/30/1997 THRU 04/30/1997							RUN DATE : 05/01/1997	
		CREDIT LINE OUTCOMES BY SPID AND DIGIT GROUP							RUN TIME : 10:35:29	
STRATEGIC PORTFOLIO ID: 02 NAME: OLD CURRENT										
DIGIT GROUP	TOTAL ACCOUNTS	NUMBER EXCLUDED	NOT ELIGIBLE	NUMBER INCREASED	NUMBER DECREASED	NUMBER UNCHANGED	AMOUNT INCREASED	AMOUNT DECREASED	OLD EXPOSURE	NEW EXPOSURE
00-09	126	56	11	20	0	39	18,600	0	602,700	621,300
10-99	1,145	511	124	230	0	280	225,300	0	5,356,100	5,581,400
TOTAL	1,271	567	135	250	0	319	243,900	0	5,958,800	6,202,700

Figure 8: The Credit Line Outcomes by SPID and Digit Group report.

## Field Reference

The headings of both reports, the Credit Line Outcomes by SPID and Digit Group and the Cash Line Outcomes by SPID and Digit Group contain the Strategic Portfolio ID and Name. The detail fields in the report matrix are identical in both reports. They are listed in table 12 on page 132.

Table 12: Fields in Reports: Credit Line Outcomes by SPID and Digit Group and Cash Line Outcomes by SPID and Digit Group.

Row headings:	
Digit Group	Digit group range for each row of the report.
Total	Totals of accounts and amounts for all digit groups within this SPID.
Column headings:	
Total Accounts	Total number of accounts in each digit group.
Number Excluded	Number of accounts in each digit group range excluded from credit or cash line treatment.
Not Eligible	Number of accounts in each digit group range not eligible for a line review this cycle.
Number Increased	Number of accounts in each digit group range whose credit or cash lines were increased. If there is a number in this field, there should be an amount in the Amount Increased field described below.
Number Decreased	Number of accounts in each digit group range whose credit or cash lines were decreased. If there is a number in this field, there should be an amount in the Amount Decreased field described below.
Number Unchanged	Number of accounts in each digit group range that were reviewed for a credit or cash line change, but were not increased or decreased.
Amount Increased	Total amount of credit or cash line increases on accounts in each digit group range. If there is an amount in this field, there should be a number in the Number Increased field.
Amount Decreased	Total amount of credit or cash line decreases on accounts in each digit group range. If there is an amount in this field, there should be a number in the Number Decreased field.
Old Exposure	Total amount of credit or cash lines for all accounts in each digit group range before this cycle's changes.
New Exposure	Total amount of credit or cash lines for all accounts in each digit group range after this cycle's credit line changes. The formula for New Exposure= ((Old Exposure - Amount Decreased) + (Amount Increased))

## Distribution by SPID, Digit Group, and Behavior Score

The Credit Line Distribution by SPID, Digit Group, and Behavior Score (see figure 9 on page 133) and Cash Line Distribution by SPID, Digit Group, and Behavior Score reports monitor the distribution of new credit extended in each behavior score range. The detailed report matrix for both reports differ in the column headings, which are either credit line ranges or cash line ranges. Rows show behavior score ranges. Ranges identified in the rows and columns can be changed using the Report Ranges table in the TMS.

Because it is sorted by digit group within SPID, it can be used to compare Champion and Challenger strategies within a SPID. A description of the fields in each report is shown in table 13 on page 134. The report has one page per SPID and digit group combination. The last page of each SPID contains the total across all digit groups in the SPID. The last page totals all SPIDs. Digit group divisions are not shown for the combined SPIDs because the digit groups vary from SPID to SPID.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 47			
REPORT ID : TRDCCLCP-10-V5.0		REPORTING PERIOD - 04/30/1997 THRU 04/30/1997										RUN DATE : 05/01/1997			
												RUN TIME : 10:35:29			
CREDIT LINE DISTRIBUTION BY SPID, DIGIT GROUP AND BEHAVIOR SCORE															
STRATEGIC PORTFOLIO ID: 02 NAME: OLD CURRENT															
DIGIT GROUP : 010 - 099															
BEHAVIOR ----- NEW CREDIT LINE (IN HUNDREDS)															
SCORE	000-000	001-009	010-019	020-029	030-039	040-049	050-059	060-069	070-079	080-089	090-099	100-109	110-129	130-999	TOTAL
000-100	54	13	34	25	27	23	49	39	32	32	10	2	0	1	341
101-120	0	1	1	2	0	0	0	0	0	1	0	0	0	0	5
121-140	1	1	1	3	1	1	0	0	0	0	0	0	0	0	8
141-160	0	0	2	1	0	1	0	0	0	0	0	0	0	0	4
161-170	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
171-180	0	2	1	0	0	1	1	0	0	0	0	0	0	0	5
181-200	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
201-250	0	0	2	2	1	0	1	0	1	0	0	0	0	0	7
251-400	2	1	13	8	6	3	4	3	1	0	0	0	0	0	41
401-420	0	0	2	1	4	1	0	0	0	0	0	0	0	0	8
421-430	0	0	1	1	1	1	0	0	0	0	0	0	0	0	4
431-440	0	0	4	1	3	1	0	0	0	0	0	0	0	0	9
441-450	0	1	2	2	1	0	0	0	0	0	0	0	0	0	6
451-460	0	0	0	1	3	2	0	0	0	0	0	0	0	0	6
461-470	0	1	2	1	0	0	1	0	0	0	0	0	0	0	5
471-480	0	2	0	2	0	2	0	0	0	0	0	0	0	0	6
481-490	0	1	3	3	2	1	2	0	0	0	0	0	0	0	12
491-500	0	0	0	5	1	3	1	2	0	0	0	1	0	0	13
501-510	0	0	1	2	2	1	1	1	0	0	0	0	0	0	8
511-520	0	0	0	2	1	2	0	0	1	1	0	0	0	0	7
521-530	0	0	3	1	0	1	1	1	1	0	0	0	0	0	8
531-540	0	0	1	3	6	6	1	0	1	1	0	0	0	0	19
541-550	0	0	0	4	2	2	0	1	1	0	0	0	0	0	10
551-560	0	0	0	2	5	0	1	0	1	1	0	0	0	0	10
561-570	0	0	0	4	3	2	1	3	3	2	0	0	0	0	18
571-580	0	1	1	2	4	7	5	3	1	1	2	0	0	0	27
581-590	0	0	0	0	5	6	3	0	1	2	0	0	0	0	17
591-600	0	1	2	2	6	3	2	5	0	1	1	0	0	0	23
601-610	0	0	2	1	4	5	2	0	1	3	1	1	0	0	20
611-620	0	0	4	1	10	4	4	4	0	7	2	0	0	0	36
621-630	0	0	3	1	3	3	2	5	4	2	1	0	0	0	24
631-640	0	0	1	2	4	7	11	17	11	11	5	1	0	1	71
641-650	0	0	3	2	1	3	5	7	2	4	2	3	0	0	32
651-660	0	0	1	0	2	9	8	9	12	11	7	4	0	0	63
661-670	0	0	0	1	1	4	6	10	12	11	4	1	0	0	50
671-680	0	0	1	2	1	1	6	9	11	16	6	3	0	0	56
681-690	0	0	0	1	2	1	4	8	15	12	6	3	0	0	52
691-700	0	0	0	0	0	0	1	5	5	13	1	6	0	0	31
701-800	0	3	5	6	2	2	1	1	6	4	2	0	0	0	32
801-999	2	8	17	7	6	4	2	1	0	0	0	0	0	0	47
TOTAL	59	37	115	109	116	113	126	134	123	136	51	24	0	2	1,145

Figure 9: The Credit Line Distribution by SPID, Digit Group and Behavior Score report.

## Field Reference

The headings of both reports, the Credit Line Distribution by SPID, Digit Group and Behavior Score and the Cash Line Distribution by SPID, Digit Group, and Behavior Score, contain the Strategic Portfolio ID and Name and the Digit Group range. The detail fields in the report matrix vary depending on which distribution is reported, credit line or cash line.

*Note: Some currencies may require reporting in a unit other than hundreds. Consult with your Fair, Isaac representative regarding this change for your installation.*

Table 13: Fields in Reports: Credit Line Distribution by SPID, Digit Group and Behavior Score and Cash Line Distribution by SPID, Digit Group, and Behavior Score.

Row headings:	
Behavior Score	The most recent aligned behavior score, segmented into ranges.
Total	Total number of accounts in each credit line or cash line range.
Column headings:	
New Credit Line (In Hundreds) or New Cash Line (In Hundreds)	Range of total credit line or cash line in hundreds after treatment at cycle time. Individual cells in the matrix show the number of accounts in each credit or cash line range.
Total	Total number of accounts in each behavior score range.

## Distribution by SPID, Digit Group, and Old Credit/Cash Line

The Credit Line Distribution by SPID, Digit Group, and Old Credit Line (see figure 10) and the Cash Line Distribution by SPID, Digit Group, and Old Cash Line reports monitor the monthly transition patterns between old and new credit or cash lines. The detailed report matrix differs depending on whether the credit or cash limit is being reported, as follows:

- In the credit line version of the report, the rows are old credit line and the columns are new credit line.
- In the cash line version, the rows are old cash line and the columns are new cash line.

Old and new credit or cash lines use the same distribution ranges. The ranges are set in the Report Ranges table of the TMS.

Because it is sorted by digit group within SPID, it can be used to compare Champion and Challenger strategies within a SPID. A description of the fields in each report is shown in table 14 on page 136.

The report has one page per SPID and digit group combination. The last page of each SPID contains the total across all digit groups in the SPID. The last page totals all SPIDs. Digit group divisions are not shown for the combined SPIDs because the digit groups vary from SPID to SPID.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 55			
REPORT ID : TRDC6LCP-11-V5.0		REPORTING PERIOD - 04/30/1997 THRU 04/30/1997										RUN DATE : 05/01/1997			
												RUN TIME : 10:35:29			
CREDIT LINE DISTRIBUTION BY SPID, DIGIT GROUP AND OLD CREDIT LINE															
STRATEGIC PORTFOLIO ID: 02 NAME: OLD CURRENT															
DIGIT GROUP : 000 - 099															
OLD CREDIT ----- NEW CREDIT LINE (IN HUNDREDS)															
LINE	000-000	001-009	010-019	020-029	030-039	040-049	050-059	060-069	070-079	080-089	090-099	100-109	110-129	130-999	TOTAL
000-000	68	0	0	0	0	0	0	0	0	0	0	0	0	0	68
001-009	0	40	7	0	0	0	0	0	0	0	0	0	0	0	47
010-019	0	0	123	39	0	0	0	0	0	0	0	0	0	0	162
020-029	0	0	0	86	38	0	0	0	0	0	0	0	0	0	124
030-039	0	0	0	0	84	46	0	0	0	0	0	0	0	0	130
040-049	0	0	0	0	0	75	28	0	0	0	0	0	0	0	103
050-059	0	0	0	0	0	0	109	32	0	0	0	0	0	0	141
060-069	0	0	0	0	0	0	0	117	19	0	0	0	0	0	136
070-079	0	0	0	0	0	0	0	0	120	20	0	0	0	0	140
080-089	0	0	0	0	0	0	0	0	0	132	14	0	0	0	146
090-099	0	0	0	0	0	0	0	0	0	0	43	3	0	0	46
100-109	0	0	0	0	0	0	0	0	0	0	0	26	0	0	26
110-129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130-999	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
-----															
TOTAL	68	40	130	125	122	121	137	149	139	152	57	29	0	2	1,271

Figure 10: The Credit Line Distribution by SPID, Digit Group, and Old Credit Line report.

## Field Reference

The headings of both reports, the Credit Line Distribution by SPID, Digit Group, and Old Credit Line and the Cash Line Distribution by SPID, Digit Group, and Old Cash Line, contain the Strategic Portfolio ID and Name and the Digit Group range. The detail fields in the report matrix vary depending on which distribution is being reported, credit line or cash line.

*Note: Some currencies may require reporting in a unit other than hundreds.*

Table 14: Fields in the Credit Line Distribution by SPID, Digit Group, and Old Credit Line and Cash Line Distribution by SPID, Digit Group, and Old Cash Line reports.

Row headings:	
Old Credit Line or Old Cash Line	Ranges of total credit line in hundreds before treatment at cycle time.
Total	Total number of accounts in each old credit or cash line range.
Column headings:	
New Credit Line (In Hundreds) or New Cash Line (In Hundreds)	Individual cells show the number of accounts in each range. The number of accounts includes all accounts, those with no changes as well as those with changes; those whose lines were not a direct result of treatment as well as those whose lines were a direct result.
Total	Total number of accounts in each new credit or cash line range.

## Credit Line Management Estimator Reports

For Credit Line strategies, the processing date and all high-level parameters in the Credit Line Parameters table and the Control fields are used to determine eligibility for increases and decreases.

The Expected Processing Date field on the Estimator Control dialog box is used in the calculation of Time-on-Books and by all other strategy keys using processing date. This processing date is also used in evaluating the five timing fields which trigger Credit Line processing. See the *TRIAD Table Maintenance Guide* for more information about setting up Estimator Control parameters.

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

A sample Credit Line Strategy Estimator - Total Amount report is shown in figure 11 on page 138 and in figure 12 on page 139. A sample Credit Line Scenario Estimator - Total Amount report is shown in figure 13 on page 140. All Credit Line Estimator reports use the same reporting matrix, which is shown in table 15 on page 141. The Credit Line decision area specific statistics are shown on the sample reports and are described in the table which follows.

TRIAD DEMO SERVICES						TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 1
REPORT ID : SANALRFP-15-5.0C						CREDIT LINE ESTIMATOR REPORT				RUN DATE : 04/15/1998
PROCESSING DATE : 11/02/1997						STRATEGY TABLE - TOTAL AMOUNT REPORT				RUN TIME : 14:49:22
STRATEGY ID: .101										
----- S T R A T E G Y   K E Y S -----										
PCTKS ROW NUMBR	CYCLES DELTQ	MOS ON BOOKS	CREDIT LINE	CURRENT UTIL	BEHAVR SCORE	CB RISK SCORE				SCEN ID
-----										
<----- OLD LINE                      CHANGED                      UNCHANGED                      NEW LINE ----->										# SCORED ODDS
001	***	***	***	***	***	***				001
					CR #		0	38	38	38
					US\$	8,710	0	8,710	8,710	0.46
002		12	***	***	***	***				001
					CR #		0	2,271	2,271	2,236
					US\$	868,367	0	868,367	868,367	2.23
003				600	***	***				001
					CR #		0	12	12	12
					US\$	8,350	0	8,350	8,350	114.08
004					630	***				002
					CR #		476	0	476	476
					US\$	291,870	96,130	0	388,000	103.09
005					640	***				004
					CR #		457	0	457	457
					US\$	327,825	276,275	0	604,100	586.08
006			1000	***	***	***				001
					CR #		0	731	731	728
					US\$	1,047,230	0	1,047,230	1,047,230	34.22
007				10	***	***				001
					CR #		0	601	601	601
					US\$	989,771	0	989,771	989,771	4.46
008					600	***				001
					CR #		0	86	86	86
					US\$	163,694	0	163,694	163,694	84.93
009					630	***				006
					CR #		91	0	91	91
					US\$	110,100	13,000	0	123,100	113.98
010					640	***				008
					CR #		149	0	149	149
					US\$	197,120	42,430	0	239,550	647.84
011				105	***	***				001
					CR #		0	9	9	9
					US\$	14,600	0	14,600	14,600	2.14
012			3000	***	***	***				001
					CR #		0	49	49	49
					US\$	147,000	0	147,000	147,000	16.79

Figure 11: A sample Credit Line Strategy Estimator report, page one.



TRIAD DEMO SERVICES				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 2			
REPORT ID : SAHALERP-15-5.0C				CREDIT LINE ESTIMATOR REPORT				RUN DATE : 04/15/1998			
PROCESSING DATE : 11/02/1997				STRATEGY TABLE - TOTAL AMOUNT REPORT				RUN TIME : 14:49:22			
STRATEGY ID: 101											
----- S T R A T E G Y   K E Y S -----											
FCYMS	CYCLES	MOS	CREDIT	CURRENT	BEHAVR	RISK			SCEN		
NUMBR	DELT	ON	LINE	UTIL	SCORE	SCORE			ID		
-----											
<----- L I N E S ----->											
		OLD LINE		CHANGED		UNCHANGED		NEW LINE			
-----											
EVALUATED		CR #		1,173		13,019		14,192			
		US\$		7,205,839		427,835		6,278,924			
								7,633,674			
								6,973			
								3.27			
INELIGIBLE		CR #		0		93		93			
		US\$		52,390		0		52,390			
								52,390			
								10.46			
EXCLUDED		CR #		0		1,453		1,453			
		US\$		143,220		0		143,220			
								143,220			
								0.22			
TOTAL		CR #		1,173		14,565		15,738			
		US\$		7,401,449		427,835		6,474,534			
								7,829,284			
								7,063			
								3.30			

Figure 12: A sample Credit Line Strategy Estimator report, page two.

**Figure 13: A sample Credit Line Scenario report.**

Table 15: Fields in Reports: Credit Line Estimator.

Row headings:	
Evaluated	For Credit Line, all accounts that are not ineligible and do not meet an exclusion criteria.
Ineligible	Accounts not excluded but not evaluated for one of the following reasons: failed timing criteria using Expected Processing Date, failed Credit Line Decrease filter as specified in the TRIAD Table Maintenance System, or met decrease only or increase only exclusions as specified in the <i>TRIAD Project Guide</i> .
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and assigned to strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Evaluated + Ineligible + Excluded + Stgy 999 (where shown) = Total
Column Headings:	
Lines	If you process Cash Lines in Credit Line, Credit Line Statistics will be followed by two lines of Cash Line Statistics. Number scored and odds are shown only once.
Old Line	Tally of all accounts and associated Credit Lines (in specified currency) before evaluation by Credit Line decision area. Account tallies are not shown because they are the same as shown under New Line.
Changed	Tally of accounts whose lines changed in Credit Line evaluation. Also, Credit Lines (in specified currency) are shown. Net increases are shown as positive; net decreases are shown as negative.
Unchanged	Tally of accounts whose lines did not change in Credit Line evaluation. Also, Credit Lines (in specified currency) are shown.
New Line	Tally of all accounts and associated Credit Lines (in specified currency) after evaluation by Credit Line decision area.
# Scored	Subset of the accounts tallied above, the number that had a behavior score in the min to max range as specified in the Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.
Odds	Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. 9,999 is a special case meaning there were no bad accounts. Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one. For more information on odds, see the chapter <i>Behavior Scoring</i> in this manual.



## 8: Delinquent Collections

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### About the Delinquent Collections Decision Area

TRIAD can act on delinquent accounts at cycle and throughout the month. It responds to changes in delinquency level or account balance and tailors actions to fit the new status. Risk evaluation is a primary element in Delinquent Collections decisions. Using risk, you can accelerate and decelerate entry into collections, and out-place problem accounts quickly. This also allows you to use less expensive collection methods, such as letters, for accounts that have a high probability of curing on their own.

When an account is delinquent at cycle, TRIAD assigns a set of actions to be taken throughout the month. Actions occur relative to cycle date. Actions assigned to Day 0 take place at cycle. Actions assigned to Day 7 take place seven days after cycle, and so forth. If an account does not cure, TRIAD follows the actions in the scenario assigned at cycle. This is the regular course of events for a delinquent account.

But what if the balance increases during the cycle or the delinquency level changes? TRIAD responds to these situations by re-examining the account and assigning new actions. This process is called dynamic reclassification. It can move the account to a more severe or a less severe scenario, depending on the account's change in profile. If the change in status results from a returned check, TRIAD can respond to the situation with a special set of actions.

This chapter examines the general case for the Delinquent Collections decision area. Your installation may differ. Please see the *TRIAD Project Guide* for specific information about the Delinquent Collections configuration at your installation. Table 1 on page 144 shows the components of the Delinquent Collections decision area.

Table 1: Components of the Delinquent Collections Decision Area.

Configuring Options	Configure Delinquent Collections processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Delinquent Collections decision area.
Trigger Events	Determine timing for an action set to be taken.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Dynamic Reclassification	Re-examines an account if its delinquency status or balance has changed during the cycle. A reclassified account may move into a scenario of greater or lesser severity depending on the direction of change.
Outcomes Reporting	Tallies and reports actions taken during the month.
Performance Reporting	Tallies transitions in delinquency from the previous to the current cycle. The transitions may be from a greater to a lesser level of delinquency or vice versa.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

The fields discussed in this section let you configure the Delinquent Collections decision area for your installation. The configuring options (see table 2) are discussed throughout the chapter.

Table 2: Configuring Options in the Delinquent Collections decision area.

Field Name	Table	Description
Upward (Worse) Dynamic Reclassification Indicator	Client Parameters	Enables/disables reclassification to a more severe scenario.
Downward (Better) Dynamic Reclassification Indicator	Client Parameters	Enables/disables reclassification to a less severe scenario.
NSF Check Scenario ID	Client Parameters	Reserves a scenario ID for accounts with checks returned for non-sufficient funds (NSF). Use of this scenario is optional.
Holding Queue Scenario ID	Client Parameters	Reserves a scenario ID for accounts with special conditions such as promise to pay.
Post on Billing Night	System Control	Indicates if the posting call is skipped on the day the cycle call is made. If skipped, posting actions occur at the cycle call.

## Exclusions

Account categories, such as bankrupt, lost, or repossessed, can be excluded from Delinquent Collections. Exclusion decisions are made in the design meetings with your Fair, Isaac representative. For example, you might exclude bankrupt and charged-off accounts from TRIAD Delinquent Collections treatment. Exclusions in each decision area are for that area only. An account that is excluded from Delinquent Collections may be processed in other areas such as Credit Line or Authorizations.

Accounts are checked for membership in an exclusion category at cycle or at daily posting processing. An account that was processed at cycle may be excluded during subsequent processing. For example, a customer whose account is delinquent at cycle might declare bankruptcy a week later. If a bankruptcy is an exclusion from delinquent collections, the account will be excluded from subsequent daily delinquent collections actions.

## Delinquent Collections Triggers

In Delinquent Collections, the primary trigger is delinquency status. If an account is delinquent at cycle and not in a TRIAD exclusion category, it is assigned a Delinquent Collections Scenario ID. TRIAD can examine delinquent accounts every day to determine if an action should be taken. Alternatively, your software can control the timing of posting calls to TRIAD.

Two types of events can trigger an action.

- If the account remains at the same delinquency level throughout the cycle, the actions prescribed by the scenario triggers will be taken.
- If the delinquency level or the balance changes, or other triggers specific to your installation change, the account may go through a process called dynamic reclassification and be assigned to a different scenario.

## Scenario Triggers

Scenario Triggers are triggers for Delinquent Collections actions. They are built directly into the scenarios (see figure 1). In the figure below, the Days column for Action 1, Action 2, and Action 3 functions as a trigger built into the scenario. It tells TRIAD to take the corresponding actions when the value in the Days field equals the number of days since cycle.

The screenshot shows the TRIAD 5.0 Scenario Triggers interface. It displays two scenarios, each with a 'Posting Actions' table.

**Scenario 1: No Action**

Day	Collection Indicator	Bank Code	Letter
Action 1:	1	1	
Action 2:	4	4	
Action 3:	4	4	

**Scenario 2: 15 Day Entry**

Day	Collection Indicator	Bank Code	Letter
Action 1:	15	1	111
Action 2:	15	1	111
Action 3:	15	1	111

Figure 1: Scenario triggers in the Delinquent Collections Scenario table.



If the account has cured, TRIAD initiates no further delinquent treatment. If the account was both delinquent and overlimit and only cures the delinquency, it may still receive overlimit treatment if your installation uses the Overlimit Collections decision area.

## Reclassification Triggers

If the account has a change in delinquency status or balance during the month, it may be re-evaluated and assigned a different scenario through a process called Dynamic Reclassification. The pre-post balance and delinquency level are compared to balance and delinquency level after posting.

- If there is an improvement in delinquency level, the account may be reassigned to a less severe scenario.
- If the delinquency level or balance has increased, the account may be assigned to a more severe scenario.

You can suppress dynamic reclassification in either direction by resetting the Upward (Worse) Dynamic Reclassification or the Downward (Better) Dynamic Reclassification fields in the Client Parameters table of the TRIAD Table Maintenance System.

## Delinquent Collections Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. You build strategy trees in the TRIAD Table Maintenance System.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

## Table and Tree

A Delinquent Collections Strategy Table has three parts: Strategy ID, key fields, and scenarios. Each has a particular function:

- A Strategy ID links a set of strategy keys to its corresponding strategy table.
- Strategy table keys define conditions causing an account to be assigned a particular scenario.
- Scenarios define treatments applied to the account.

Whether you view your Delinquent Collections strategy as a table (figure 2) or a tree (figure 3 on page 149) you can see a one-to-one correspondence of each table row and each tree branch. Both rows and branches consist of key values and a resulting action.

SCEN ID	CYCLES DELQ	RECENT RT LINE UTIL	BALANCE	BEHAVR SCORE	BALANCE AT RISK	CE SCORE
101	1	000000	000000	000000	000000	000000
102	2	000000	000000	000000	000000	000000
103	3	000000	000000	000000	000000	000000
104	4	000000	000000	000000	000000	000000
105	5	000000	000000	000000	000000	000000
106	6	000000	000000	000000	000000	000000
107	7	000000	000000	000000	000000	000000
108	8	000000	000000	000000	000000	000000
109	9	000000	000000	000000	000000	000000
110	10	000000	000000	000000	000000	000000

Figure 2: The Delinquent Collections Strategy table.

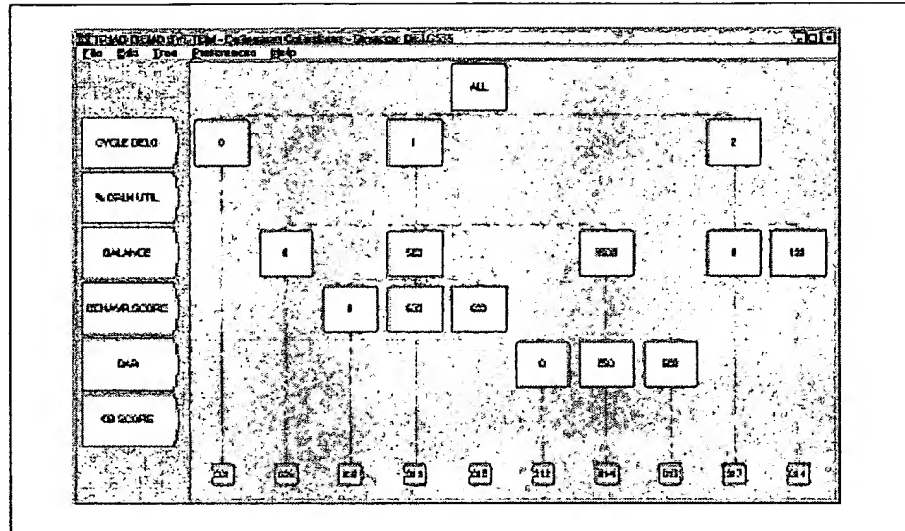


Figure 3: The Delinquent Collections Strategy tree.

## Sample Strategy Keys

The keys described in this section (see table 3) are used in the Delinquent Collections treatment area. Keys are defined during the design meetings with your Fair, Isaac representative. Consequently, the keys described in this section may differ from those used in your installation. Consult the *TRIAD Project Guide* for a description of the keys used in your implementation of Delinquent Collections.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among decision area strategies. The maximum number of keys in a strategy is fifteen. However, you need only select those keys that are needed for your strategy. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative. Table 3 shows some frequently used Delinquent Collections keys.

Table 3: Frequently Used Delinquent Collection strategy keys.

Cycles Delinquent	Delinquency level. This field can change during the cycle to reflect improving or worsening conditions.
Time-On-Books	Number of months an account has been open. This number is often one-relative; that is, one is added to the calculation so that the first month it is open, Time-on-Books equals one.
%Credit Line Used	The current balance expressed as a percent of the credit line. When the number is greater than 100%, the account is overlimit. Accounts that are both overlimit and delinquent are treated in Delinquent Collections.
Outstanding Balance	Current balance of the account. The Outstanding Balance calculation may exclude disputed balances or include authorizations, if desired.
Behavior Score	An account's behavior score.
Balance at Risk	Current balance multiplied by the probability of the account going bad.
Credit Bureau Score	The account's credit bureau score.

## Delinquent Collections Scenarios

Delinquent Collections scenarios define actions taken on accounts. They can occur at cycle or throughout the month during daily processing. Each scenario has up to three sets of actions phased throughout the cycle.

Scenarios can include the following actions:

- Print a statement message (cycle only)
- Include a statement insert (cycle only)
- Send a letter
- Set a block or status code
- Queue an account for collections
- Take no action at all (all action fields set to blanks)

All strategies use scenarios from the Delinquent Collections Scenario table. Because the Delinquent Collections Scenario ID is a 3-digit number, the table can hold up to 999 occurrences, if required. See your *TRIAD Project Guide* for the number selected for your installation.

Four scenarios should be set aside for special use (see table 4 on page 151).

Table 4: Special-Use Scenarios fields.

Scenario 000	Identifies accounts not delinquent at cycle. It appears on the Delinquent Outcomes by SPID, Digit Group and Scenario ID report with a tally of accounts that were reclassified out of scenario 000 during the cycle.
No action scenario	Identifies the scenario in which no action is taken.
NSF Scenario ID	Reserved for treatment of accounts with checks returned for non-sufficient funds (NSF). If an account is treated by this scenario, it will not go through dynamic reclassification, even if its delinquency level changes during the current cycle.
Holding Queue Scenario ID	Reserved for treatment of accounts with special conditions such as promise to pay.

## Scenario Fields

The Delinquent Collections scenario in figure 4 on page 151 shows the actions for treatment of delinquent accounts.

TRIAD provides two cycle-only actions: printing a statement message and including a statement insert. Other actions can be taken at cycle or during daily processing depending on the setting of the Day parameter. Scenario fields are described table 5 on page 152. See the *TRIAD Project Guide* for descriptions of how these fields have been implemented at your installation.

The screenshot displays the TRIAD software interface for managing delinquent collections scenarios. It features two main sections, one for Scenario 000 and one for Scenario 001. Each section includes a description of the scenario and two tables of actions.

**Scenario 000: 30 Day Entry into Collections**

Delinquent/Due Date Actions		Posting Actions			
Statement Message	Statement Insert	Day	Collection Indicator	Check Code	Letter
02		01	001	0	001
		02	002	0	001
		03	003	0	001

**Scenario 001: 25 Day Entry into Collections - net off credits at Day 43**

Delinquent/Due Date Actions		Posting Actions			
Statement Message	Statement Insert	Day	Collection Indicator	Check Code	Letter
01		01	001	0	001
		02	002	0	001
		03	003	0	001

Figure 4: The Delinquent Collections Scenario table.

Table 5: Delinquent Collections Scenario fields.

<b>ID</b>	Identifies the Delinquent Collections scenario.
<b>Description</b>	Provides a description of the scenario; for example, when it was implemented or its impact on collections or customer service.
<b>Statement Message</b>	Identifies a message to be printed on the customer's statement. This field is available only at cycle. Leave it blank if a statement message is not used.
<b>Statement Insert</b>	Identifies an optional statement insert. Leave it blank if statement inserts are not used in this scenario. To use a statement insert, the Produce Statement Insert field in the System Control table of the TRIAD Table Maintenance System must be set to 1.
<b>Day</b>	Indicates the number of calendar days since cycle billing when each action set occurs. These fields are scenario triggers. A value of 0 means that the actions occur at cycle, a value of 1 indicates one day after cycle and so forth. A typical range of values is 0 - 27. Up to three action sets may be specified. If an action set is not used, the Day parameter is blank.
<b>Collection Indicator</b>	Identifies a collection activity; such as assignment to a specific queue, dialer, or collector. Each code has a corresponding number between 00 and 99, indicating its relative severity level. Each action set in a scenario may have a Collection Indicator. However, multiple Collection Indicator assignments must be arranged in increasing severity within the scenario. If a Collection Indicator is not needed, set it to blanks.
<b>Block Code</b>	Identifies a block or status code; such as delinquent, block authorizations, or card pickup. Each code has a corresponding number between 00 and 99, indicating its relative severity level. Each action set may have a Block Code. However, multiple Block Code assignments must be arranged in increasing severity within the scenario. If a Block Code is not needed, set it to blanks.
<b>Letter</b>	Identifies a letter to be sent to the customer. Letters are not checked for severity.

## Dynamic Reclassification

If a delinquent account has a change in delinquency status or balance during the cycle, it can be re-evaluated and assigned a different scenario. This process is called Dynamic Reclassification. TRIAD can reassign an account to a more severe or a less severe scenario, depending on the direction of the changes to the account's profile. There are two occasions when an account that would otherwise qualify may not be reclassified:

- If Upward Dynamic Reclassification or Downward Dynamic Reclassification have been disabled on the Client Parameters table of the TRIAD Table Maintenance System
- If the account has been assigned to a NSF scenario

Dynamic reclassification can be tailored to your company's needs. Some configuring options, which are documented in your TRIAD Project Guide, may cause variations on the following process. The remainder of this discussion assumes the selection of default values for configuring options. Other options are detailed during the TRIAD design process.

## Timing

Once an account is assigned a Delinquent Collections scenario, its balance and delinquency level are checked during the daily post. If the account's balance or delinquency are unchanged, the account continues in the assigned scenario. If the account has cured and is no longer delinquent, TRIAD initiates no further Delinquent Collections treatment. But if an account's delinquency level changes or if its balance increases for any reason other than non-sufficient funds, the account is re-evaluated in the Delinquent Collections Strategy table and potentially assigned a different scenario. Your installation may have other conditions which cause dynamic reclassification. See your *TRIAD Project Guide* for details about the triggers specific to your installation.

An account assigned to the NSF scenario is the exception to the general case for reclassification. Once it receives this assignment, it continues in this scenario for the remainder of the cycle. It is not reassigned based on balance or delinquency status.

## Downward Reclassification

If an account's delinquency level decreases, but does not cure, it may be re-evaluated in the Strategy table and assigned to a less severe scenario. TRIAD calculates the number of days since cycle billing and uses the value to establish which actions would have been taken had the new scenario been assigned at cycle billing. TRIAD then returns a compilation of the actions due for the account at the time of the reclassification. There is no severity level checking across scenarios during a downward reclassification.

## Upward Reclassification

If an account's balance or delinquency level increases, it is a candidate for upward dynamic reclassification. It is a two-part process:

1. The account is re-evaluated in the Strategy table and assigned a new scenario.
2. TRIAD determines which actions to take.

The second part of the procedure ensures that the most severe actions are taken. A more detailed explanation is shown in figure 5:

<b>Step 1</b>	TRIAD calculates the number of days since cycle billing or payment. This value establishes the actions taken in the old scenario and the actions that would have been taken in the new scenario.
<b>Step 2</b>	TRIAD compares the severity of the Block Codes and Collection Indicators in the action sets for the two scenarios. It is looking for the most severe action that has been taken or would have been taken. It does not compare letters.
<b>Step 3</b>	<p>TRIAD takes an action:</p> <ul style="list-style-type: none"> <li>• If the actions in the new scenario are more severe, TRIAD returns those to the calling program. The new scenario determines future actions.</li> <li>• If the actions in the old scenario are more severe, no new actions are returned today. The new scenario determines future actions.</li> </ul> <p>Letters are sent only if they are associated with a block code or collection indicator. The only exception is: if no actions were taken in the old scenario and the only action that could be taken by now in the new scenario is sending a standalone letter.</p>

Figure 5: Steps for Upward Dynamic Reclassification.



## Examples of Delinquent Accounts

Consider two delinquent accounts that showed a change in delinquency status or an increase in account balance at posting.

<b>Account A</b>	Downward dynamic reclassification Delinquency decreased from 2-cycles at billing to 1-cycle at posting.
<b>Account B</b>	Upward dynamic reclassification Delinquency remained at 1-cycle, but balance increased from \$145 to \$555.

Figure 6: Delinquent Account examples.

### Downward Reclassification: Account A

At cycle, Account A was evaluated and assigned Scenario 023. Several days later at daily posting, Account A showed a payment of \$60. This partial payment improved Account A's delinquency status from 2-cycle to 1-cycle delinquent. When the account went through the strategy table again, it was reclassified into a new scenario, 005. Scenario 005 called for a block code T at Day 0.

Figure 7 shows Account A's condition at cycle and at the later posting.

Key	Value at Cycle	Value at Daily Posting
Cycles Delinquent	2 cycles	1 cycle
Ever Paid	Yes	Yes
Time-on-Books	12 months	12 months
Balance	\$1,000	\$940
Behavior Score	550	550
Scenario ID	023	005

Figure 7: Account A's condition at cycle and posting.

Because Account A was reclassified downward, TRIAD did not have to compare the severity of actions in the new and old scenarios.

TRIAD returns the action for Day 0 (block code T) in Scenario 005 since this action would have already been done.

Account A will continue in Scenario 005 until its delinquency level changes or the balance increases, or it is re-evaluated at the next cycle. In the Delinquency Outcomes reports, it is counted as reclassified out of an old scenario (023) and reclassified into a new scenario (005).

## Upward Reclassification: Account B

At cycle, Account B was evaluated and assigned Scenario 005. Several days later at posting, Account B's balance increased from \$145 to \$555. When Account B went through the Strategy table again, it was reclassified from Scenario 005 to 010, because its balance increased above the \$500 node. Figure 8 shows Account B's condition at cycle and at the later posting.

Key	Value at Cycle	Value at Daily Posting
Cycles Delinquent	1 cycle	1 cycle
Ever Paid	Yes	Yes
Time-on-Books	12 months	12 months
Balance	\$145	\$555
Behavior Score	490	490
Scenario ID	005	010

Figure 8: Account B's condition at cycle and posting.

Because Account B is an upward reclassification, TRIAD must compare the severity of the actions in the two scenarios. The steps are summarized in figure 9:

<b>Step 1</b>	What is today's offset from cycle? Today is day 15.
<b>Step 2</b>	What actions would have been taken in each scenario by now? Scenario 005 (old): Block code T has been set Scenario 010 (new): Block code P would have been set and the account would have been sent to collections.
<b>Step 3</b>	Which actions are the most severe? TRIAD checks the Severity Tables and finds that the actions in Scenario 010 are more severe.
<b>Step 4</b>	Which actions are taken? TRIAD returns the actions in Scenario 010 to the calling program. Those actions are: set block code P, send to collections, and send the corresponding letter. Further treatments of the account will come from Scenario 010, as governed by the Day field, until the account cures, worsens, or is assigned to a different scenario at the next cycle.

Figure 9: Steps for comparing severity of actions in two scenarios.

## Delinquent Collections Outcomes Reporting

TRIAD records information about actions at cycle and daily posting. Each time an action occurs, a record is written to the Report Record file. At the end of the month, all the information is tallied and summarized for reporting.

The Delinquent Outcomes reports show the effects of strategies on the accounts, in terms of actions taken, operational impact, and cure rate. Because the reports are summarized by SPID and digit group, you can easily compare Champion and Challenger strategies. There are three varieties of Delinquent Collections Cycle Tally reports:

- Outcomes by SPID, Delinquency Level, and Digit Group
- Outcomes by SPID, Digit Group, and Scenario
- Outcomes Percentages by SPID, Digit Group, and Scenario

### Production Schedule

Typically, cycle tally reports are produced at month-end. If needed, they can also be produced daily or weekly. Under normal conditions, monthly reports are sufficient. However, during the first month of a new strategy you may want daily or weekly tallies.

Reports are produced by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data.

## Delinquent Outcomes by SPID, Delinquency Level, and Digit Group

The Delinquent Outcomes by SPID, Delinquency Level, and Digit Group report (see figure 10) presents Delinquent Collections activities for each delinquency level and digit group range. The outcomes listed are from cycle and daily processing.

This report can help you determine the relative cost and benefits of different Champion and Challenger strategies.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE						PAGE NO : 282				
REPORT ID : TRDC6DXP-21-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997						RUN DATE : 08/02/1997				
										RUN TIME : 23:39:26				
DELINQUENT OUTCOMES BY SPID, DELINQUENCY LEVEL AND DIGIT GROUP														
STRATEGIC PORTFOLIO ID: -- NAME: -- ALL --														
DELINQUENCY AT BILLING: 1 CYCLE														
DIGIT GROUP	TOTAL ACCTS	TOTAL TREATED	TOTAL BALANCES	BILL ACT MSG	ACT INSERT	DAYS SINCE BILL	LETTER	DAILY ACT BLOCK	COLLECT	TOTAL ACCTS	CURED BALANCES	CUMUL %BAL CURED	TOTAL RECLASSED	
00-49	4,756	4,080	5,529,333	4,065	0	00-04		0	14	0	0	.0	0	
						05-09		2	632	0	145	172,016	3.1	0
						10-14		2	423	0	261	316,548	8.8	0
						15-19		0	377	0	320	422,875	16.4	0
						20-24		0	167	0	213	269,065	21.3	0
						25-CY		2	314	0	638	803,292	35.8	0
						TOTAL		6	1,927	0	1,577	1,983,796	35.8	0
50-99	4,752	4,119	5,500,012	4,105	0	00-04		0	328	0	56	59,859	1.0	0
						05-09		2	561	0	160	192,049	4.5	0
						10-14		2	424	0	309	400,681	11.8	0
						15-19		0	184	0	188	223,433	15.9	0
						20-24		0	310	0	421	520,199	25.3	0
						25-CY		1	210	0	427	527,028	34.9	0
						TOTAL		5	2,017	0	1,561	1,923,249	34.9	0
TOTAL	9,508	8,199	11,029,345	8,170	0	00-04		0	342	0	56	59,859	.5	0
						05-09		4	1,193	0	305	364,065	3.8	0
						10-14		4	847	0	570	717,229	10.3	0
						15-19		0	561	0	508	646,308	16.2	0
						20-24		0	477	0	634	789,264	23.3	0
						25-CY		3	524	0	1,065	1,330,320	35.4	0
						TOTAL		11	3,944	0	3,138	3,907,045	35.4	0

Figure 10: The Delinquent Outcomes by SPID, Delinquency Level, and Digit Group report.

## Field Reference

The report headings for the Delinquent Outcomes by SPID, Delinquency Level, and Digit Group report are Reporting Period, Strategic Portfolio ID and Name, Delinquency Level, and Digit Group. Reporting period spans the period from the first cycle or daily record in the file until the last. Table 6 shows the fields in the report.

Table 6: Fields in Report: Delinquent Outcomes by SPID, Delinquency Level, and Digit Group.

<b>Row headings:</b>	
Digit Group	Random digit group ranges as assigned in the Strategy Assignment able.
Total	Totals of accounts and balances for all digit groups within this delinquency level
<b>Column headings:</b>	
Total Accounts	Total number of accounts for each digit group. The Total Accounts minus the Total Accounts Treated equals the number of excluded accounts and those assigned to Strategy ID 999, at each delinquency level. The grand Total Accounts includes non-delinquent as well as delinquent accounts.
Total Accounts Treated	Total number of accounts in each digit group which were assigned a Delinquent Collections scenario at cycle.
Total Treated Balances	Total of the balances of the accounts for each digit group which were assigned a Delinquent Collections action at cycle.
Bill Act	Heading for the actions taken at billing: Number of accounts that received statement messages (Message) Number of accounts that received a statement insert (Insert)
Days Since Bill	Number of days since billing that the actions, shown in the columns to the right, occurred.
Daily Actions	Heading for the actions taken based on the days since billing. These actions include those taken at cycle and those taken during daily processing.
Letter	Number of accounts that were sent a letter during the indicated number of days since billing.
Block	Number of accounts on which a block was placed during the indicated number of days since billing.
Collect	Number of accounts that were sent to collections during the indicated number of days since billing.
Total Cured	Heading for the information about accounts that were cured.
Accounts	Number of accounts that were cured during the indicated number of days since billing.
Balances	Balances of the accounts that were cured during the indicated number of days since billing.
Cumulative %Balance Cured	Cumulative balance percentage for accounts cured. This field shows the balance cured as a percentage of the total treated balances. The number in the first row is the balance cured from billing through Day 4 divided by total balance. The second row shows the balance cured from billing through Day 9 divided by the total balance. The third row shows the balance cured from billing through Day 14 divided by the total balance, and so forth.
Total Reclassed	Number of accounts reclassified to a new Delinquent Collections scenario during the indicated number of days since billing.

## Delinquent Outcomes by SPID, Digit Group, and Scenario

The Delinquent Outcomes by SPID, Digit Group, and Scenario ID report (see figure 11) shows activities of each Delinquent Collections scenario and digit group combination. The activities listed are from cycle and daily processing.

This report can help you determine the relative cost and benefits of different Champion and Challenger strategies by comparing the performance of their scenarios.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE								PAGE NO : 333			
REPORT ID : TRDC6DXP-22-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997								RUN DATE : 08/02/1997			
				DELINQUENT OUTCOMES BY SPID, DIGIT GROUP AND SCENARIO								RUN TIME : 23:39:26			
STRATEGIC PORTFOLIO ID: --				NAME: -- ALL --											
DIGIT GROUP : 00 - 99															
SCEN	TREATED	-ACTION 1--	--ACTION 2--	-ACTION 3--	PRE	CURED	TOTAL TO %	-----	ACTION TAKEN	----	-- RECLASSED				
ID	ACCOUNTS	CURE	DONE	CURE	DONE	CURE	CURED TRTD	INSERT	LETTER	BLOCK	COLLECT	IN	OUT		
001	9	6	0	0	0	0	6 66.6	0	0	0	0	0	0		
009	40	19	22	0	1	0	19 47.5	0	24	2	0	4	0		
010	41	16	26	0	0	0	16 39.0	0	27	27	1	2	0		
031	27	7	14	0	0	0	7 25.9	0	0	14	14	0	6		
099	51,677	22,733	28,944	0	0	0	22,733 43.9	0	0	28,944	0	0	0		
-----															
TOTAL	51,794	22,781	29,006	0	1	0	22,781 43.9	0	51	28,987	15	6	6		

Figure 11: The Delinquent Outcomes by SPID, Digit Group and Scenario report.

## Field Reference

The headings for the Delinquent Outcomes by SPID, Digit Group, and Scenario report are Reporting Period, Strategic Portfolio ID, Name and the Digit Group.

Reporting period spans the period from the first cycle or daily record in the file until the last. Table 7 shows the fields in the report.

Table 7: Fields in Report: Delinquent Outcomes by SPID, Digit Group and Scenario.

<b>Row headings:</b>	
Scenario ID	Scenario ID of the accounts shown in this row of the report.
Total	Total numbers of accounts and actions for all scenarios.
<b>Column headings:</b>	
Treated Accounts	Number of accounts treated by the scenario ID.
Action 1	Action 1 can consist of sending a letter, setting a block or status code, and/or queuing an account to collections. The actions vary by scenario.
Cure	Number of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 1 was taken.
Done	Number of accounts on which Action 1 was taken.
Action 2	Action 2 can consist of sending a letter, setting a block or status code, and/or queuing an account to collections. The actions vary by scenario.
Cure	Number of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 2 was taken.
Done	Number of accounts on which Action 2 was taken.
Action 3	Action 3 can consist of sending a letter, setting a block or status code, and/or queuing an account to collections. The actions vary by scenario.
Cure	Number of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 3 was taken.
Done	Number of accounts on which Action 3 was taken.
Pre-Cycle Cure	Number of accounts treated by each scenario that cured after Action 3 was taken but before the account cycled again.
Total Cured	Total number of accounts that cured.
Cured to Treated %	Percentage of treated accounts that cured: Total Cured divided by Treated Accounts.
Action Taken	Four actions taken on accounts:
Insert	Number of accounts that were sent a statement insert.
Letter	Number of treated accounts that were sent a letter at cycle or posting.
Block	Number of treated accounts on which a block code was set.
Collect	The number of treated accounts that were sent to collections.

Table 7: Fields in Report: Delinquent Outcomes by SPID, Digit Group and Scenario.

Reclassified	Tally of accounts reclassified in or out of a scenario. For an explanation of reclassification, see the <i>Dynamic Reclassification</i> section in this chapter.
In	Number of accounts reclassified into a new Delinquent Collections scenario during this reporting period.
Out	Number of accounts reclassified out of a Delinquent Collections scenario during this reporting period.

## Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario

The Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario report (see figure 12) shows the percentage of the total accounts treated by the scenario in each treatment category. The activities listed are from cycle and posting.

This report can help you determine the relative cost and benefits of different Champion and Challenger strategies by comparing the performance of their scenarios.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE								PAGE NO : 365			
REPORT ID : TRDC6DXP-23-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997								RUN DATE : 08/02/1997			
												RUN TIME : 23:39:26			
DELINQUENT OUTCOMES PERCENTAGES BY SPID, DIGIT GROUP AND SCENARIO															
STRATEGIC PORTFOLIO ID: -- NAME: -- ALL --															
DIGIT GROUP : 00 - 99															
SCEN	TREATED	-ACTION 1--	--ACTION 2--	--ACTION 3--	PRE	TOTAL	CURED	TO %	-RECLASSIFIED-						
ID	ACCOUNTS	%CURE %DONE	%CURE %DONE	%CURE %DONE	CYCLE	CURED	TRTD	INSERT	LETTER	BLOCK	COLLECT	%IN	%OUT		
001	9	66.67 0.00	0.00 0.00	0.00 0.00	0.00 0.00	6	66.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
009	40	47.50 55.00	0.00 2.50	2.50 0.00	0.00 0.00	19	47.5	0.00	60.00	5.00	0.00	10.00	0.00	10.00	0.00
010	41	39.02 63.41	0.00 0.00	2.44 0.00	0.00 0.00	16	39.0	0.00	65.85	65.85	2.44	4.88	0.00	4.88	0.00
031	27	25.93 51.85	0.00 0.00	0.00 0.00	0.00 0.00	7	25.9	0.00	0.00	51.85	51.85	0.00	22.22	0.00	22.22
099	51,677	43.99 56.01	0.00 0.00	0.00 0.00	0.00 0.00	733	44.0	0.00	0.00	56.01	0.00	0.00	0.00	0.00	0.00
-----															
TOTAL 51,794		43.98 56.00	0.00 2.50	2.48 0.00	0.00 0.00	781	44.0	0.00	60.10	55.97	0.03	0.01	0.01	0.01	0.01

Figure 12: The Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario report.



## Field Reference

The report headings for the Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario report are Reporting Period, Strategic Portfolio ID and Name, and the Digit Group.

The reporting period spans the period from the first cycle or daily record in the file until the last. Table 8 shows the fields in the report.

Table 8: Fields in Report: Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario.

Row headings:	
Scenario ID	The scenario ID of the accounts shown in this row.
Total	Total numbers and percentages of accounts and actions for all scenarios.
Column Headings:	
Treated Accounts	The number of treated accounts with each scenario ID.
Action 1	Action 1 can consist of sending a letter, setting a block or status code, and/or routing an account to collections.
% Cure	Percentage of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 1 was taken.
% Done	Percentage of accounts on which Action 1 was taken.
Action 2	Action 2 can consist of sending a letter, setting a block or status code, and/or routing an account to collections.
% Cure	Percentage of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 2 was taken.
% Done	Percentage of accounts on which Action 2 was taken.
Action 3	Action 3 can consist of sending a letter, setting a block or status code, and/or routing an account to collections.
% Cure	Percentage of accounts treated by each scenario that were classified delinquent at cycle, but cured before Action 3 was taken.
% Done	Percentage of accounts on which Action 3 was taken.
Pre-Cycle %Cure	Number of accounts in each scenario that cured after Action 3 was taken but before the account cycled again.
Total Cured	Total number of accounts that cured.
Cured to Treated %	Percentage of treated accounts that cured: Total Cured divided by Treated Accounts.
Action Taken	Four actions taken on accounts:
Insert	Percentage of treated accounts that were sent a statement insert.
Letter	Percentage of treated accounts that were sent a letter.

Table 8: Fields in Report: Delinquent Outcomes Percentages by SPID, Digit Group, and Scenario. (continued)

Block	Percentage of treated accounts on which a block code was set.
Collect	Percentage of treated accounts on which a collection indicator was set.
Reclassified	Percentage of treated accounts reclassified in or out of a Delinquent Collections scenario during this reporting period.
% In	Percentage of treated accounts reclassified into a new Delinquent Collections scenario during this reporting period.
% Out	Percentage of treated accounts reclassified out of a Delinquent Collections scenario during this reporting period.

## Delinquent Collections Performance Reporting

This section examines the two transition matrix reports, Delinquent Account Status Transition Matrix by SPID and Digit Group and Delinquent Balance Status Transition Matrix by SPID and Digit Group. The first report monitors changes in account delinquency status. The second report shows the same information, but with the counts weighted by the current month's balance. Both reports tally the number of accounts that move to a higher level of delinquency and the number of accounts that move to a lower level of delinquency.

Each page of the report is a matrix; rows are prior month's delinquency, columns are the current month's delinquency. For example, accounts that were 1-cycle delinquent last month and progressed to 2-cycles delinquent this month would be in the third cell of the second row. In addition to the tally or balance of the cell, the report shows statistics associated with it, such as the average balance.

Both reports contain:

- A separate report for each digit group and SPID combination
- One page for all digit groups in the SPID

A final page of the report with all SPIDs. Digit group divisions are not shown for the combined SPIDs because the digit groups vary from SPID to SPID.

## Delinquent Account Status Transition Matrix by SPID and Digit Group

This report (see figure 13) shows the number of accounts moving to the next higher or lower level of delinquency. The rows are the prior month's delinquency status. The columns are the current's month delinquency status. Each cell represents movement from the prior to the current month's status.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE						PAGE NO : 63	
REPORT ID : TRDC6DTP-01-V5.0		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997						RUN DATE : 08/02/97	
								RUN TIME : 23:40:31	
DELINQUENT ACCOUNT STATUS TRANSITION MATRIX BY SPID AND DIGIT GROUP									
STRATEGIC PORTFOLIO ID : -- SPID NAME : -- ALL --									
DIGIT GROUP : 00-99									
----- C U R R E N T M O N T H -----									
FROM:	TO:	CURRENT ACTIVE	1 CYCLE	2 CYCLE	3 CYCLE	4 CYCLE	5+ CYCLE	CHG OFF	ROW TOTALS
CURRENT	ACCOUNTS	650,807	26,899	0	0	0	0	132	677,838
	ROW PCT	96.0	4.0	0.0	0.0	0.0	0.0	0.0	100.0
	COL PCT	96.8	71.5	0.0	0.0	0.0	0.0	10.1	93.3
	TOT PCT	89.6	3.7	0.0	0.0	0.0	0.0	0.0	93.3
	AVG BAL	408.90	1,213.06	0.00	0.00	0.00	0.00	876.34	440.90
P	1 CYCLE	ACCOUNTS	18,344	8,383	7,349	0	0	61	34,137
	ROW PCT	53.7	24.6	21.5	0.0	0.0	0.0	0.2	100.0
	COL PCT	2.7	22.3	83.6	0.0	0.0	0.0	4.7	4.7
	TOT PCT	2.5	1.2	1.0	0.0	0.0	0.0	0.0	4.7
	AVG BAL	1,137.39	1,711.36	1,459.67	0.00	0.00	0.00	1,717.79	1,348.75
O	2 CYCLE	ACCOUNTS	2,533	1,967	1,107	2,552	0	104	8,263
	ROW PCT	30.7	23.8	13.4	30.9	0.0	0.0	1.3	100.0
	COL PCT	0.4	5.2	12.6	82.9	0.0	0.0	7.9	1.1
	TOT PCT	0.3	0.3	0.2	0.4	0.0	0.0	0.0	1.1
	AVG BAL	1,147.53	1,591.45	1,796.86	1,589.29	0.00	0.00	1,900.44	1,486.11
M	3 CYCLE	ACCOUNTS	448	292	285	454	1,275	0	2,860
	ROW PCT	15.7	10.2	10.0	15.9	44.6	0.0	3.7	100.0
	COL PCT	0.1	0.8	3.2	14.7	85.5	0.0	8.1	0.4
	TOT PCT	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.4
	AVG BAL	1,100.22	1,435.07	1,616.94	1,755.27	1,727.62	0.00	2,100.79	1,606.66
T	4 CYCLE	ACCOUNTS	220	58	41	63	187	937	1,607
	ROW PCT	13.7	3.6	2.6	3.9	11.6	58.3	6.3	100.0
	COL PCT	0.0	0.2	0.5	2.0	12.5	53.8	7.7	0.2
	TOT PCT	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
	AVG BAL	1,191.63	1,504.98	1,308.24	1,710.16	1,917.92	1,798.59	1,909.52	1,709.78
H	5+CYCLE	ACCOUNTS	230	35	6	9	30	804	1,920
	ROW PCT	12.0	1.8	0.3	0.5	1.6	41.9	42.0	100.0
	COL PCT	0.0	0.1	0.1	0.3	2.0	46.2	61.5	0.3
	TOT PCT	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3
	AVG BAL	1,338.14	1,739.84	1,611.34	1,632.84	1,590.97	1,856.35	1,948.04	1,824.68
COLUMN	ACCOUNTS	672,582	37,634	8,788	3,078	1,492	1,741	1,310	726,625
TOTALS	ROW PCT	92.6	5.2	1.2	0.4	0.2	0.2	0.2	100.0
	COL PCT	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	TOT PCT	92.6	5.2	1.2	0.4	0.2	0.2	0.2	100.0
	AVG BAL	432.58	1,346.50	1,506.64	1,616.37	1,748.73	1,825.26	1,834.94	506.49

Figure 13: The Delinquent Account Status Transition Matrix by SPID and Digit Group report.

## Field Reference

The headings for the Delinquent Account Status Transition Matrix by SPID and Digit Group report are Reporting Period, Strategic Portfolio ID and Name, and Digit Group. Table 9 shows the fields in the report.

Table 9: Fields in Report: Delinquent Account Status Transition Matrix by SPID and Digit Group.

<b>Row headings:</b>	
From: Prior Month	Account status from the prior month.
Column Totals	The total number of accounts for the column and the corresponding percentages and average balance.
<b>Column headings:</b>	
To: Current Month	Account has moved into the current month. The first six columns correspond to the first six rows and create the matrix. These labels indicate the level of delinquency.
Current Active	Accounts that have a non-zero balance and that are not delinquent.
1-Cycle	Accounts that are currently 1-cycle delinquent.
2-Cycle	Accounts that are currently 2-cycles delinquent.
3-Cycle	Accounts that are currently 3-cycles delinquent.
4-Cycle	Accounts that are currently 4-cycles delinquent.
5+ -Cycle	Accounts that are currently 5 or more cycles delinquent excluding charged-off accounts.
Charge-off	Accounts that are charged-off this month. Accounts charged-off in the prior month do not appear in the report.
Account Details	Each cell of the matrix shows five details about the accounts.
Accounts	Number of accounts in the cell.
Row Percent	Number of accounts in the cell as a percentage of the total number of accounts in the row.
Column Percent	Number of accounts in the cell as a percentage of the total number of accounts in the column.
Total Percent	Number of accounts in the cell as a percentage of the total number of accounts in this page of the report.
Average Balance	Average balance of the accounts in the cell.
Row Totals	The total number of accounts for the row and the corresponding percentages and average balance.

## Delinquent Balance Status Transition Matrix by SPID and Digit Group

The Delinquent Balance Status Transaction Matrix report (see figure 14) is a companion to the Delinquent Account Status Transition Matrix report. It monitors the same transitions, focusing on the number of accounts weighted by the current month's balance. Each cell represents the current month's balance for accounts that moved from the prior to the current month's delinquency status.

Like the other transition matrix report, the rows show the prior month's delinquency status. The columns show current month's delinquency status.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE					PAGE NO : 64	
REPORT ID : TRDC6DTP-02-V5.0		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997					RUN DATE : 08/02/1997	
							RUN TIME : 23:40:31	
DELINQUENT BALANCE STATUS TRANSITION MATRIX BY SPID AND DIGIT GROUP								
STRATEGIC PORTFOLIO ID : -- SPID NAME : -- ALL --								
DIGIT GROUP : 00-99								
----- C U R R E N T M O N T H -----								
FROM:	TO: CURRENT ACTIVE	1 CYCLE	2 CYCLE	3 CYCLE	4 CYCLE	5+ CYCLE	CHG OFF	ROW TOTALS
CURRENT	BALANCES	266,113,608	32,630,225	0	0	0	115,676	298,859,510
	ROW PCT	89.0	10.9	0.0	0.0	0.0	0.0	100.0
	COL PCT	91.5	64.4	0.0	0.0	0.0	4.8	81.2
	TOT PCT	72.3	8.9	0.0	0.0	0.0	0.0	81.2
	AVG BAL	408.90	1,213.06	0.00	0.00	0.00	876.340	440.90
P	1 CYCLE	BALANCES	20,864,218	14,346,308	10,727,121	0	104,785	46,042,433
R	ROW PCT	45.3	31.2	23.3	0.0	0.0	0.2	100.0
	COL PCT	7.2	28.3	81.0	0.0	0.0	4.4	12.5
I	TOT PCT	5.7	3.9	2.9	0.0	0.0	0.0	12.5
	AVG BAL	1,137.39	1,711.36	1,459.67	0.00	0.00	1,717.790	1,348.75
O	2 CYCLE	BALANCES	2,906,701	3,130,387	1,989,12	4,055,858	0	12,279,716
R	ROW PCT	23.7	25.5	16.2	33.0	0.0	0.0	100.0
	COL PCT	1.0	6.2	15.0	81.5	0.0	8.2	3.3
	TOT PCT	0.8	0.9	0.5	1.1	0.0	0.0	3.3
	AVG BAL	1,147.53	1,591.45	1,796.86	1,589.29	0.00	1,900.440	1,486.11
M	3 CYCLE	BALANCES	492,896	419,040	460,827	796,892	2,202,721	4,595,061
O	ROW PCT	10.7	9.1	10.0	17.3	47.9	0.0	100.0
	COL PCT	0.2	0.8	3.5	16.0	84.4	0.0	1.2
N	TOT PCT	0.1	0.1	0.1	0.2	0.6	0.0	1.2
	AVG BAL	1,100.22	1,435.07	1,616.94	1,755.27	1,727.62	0.00	1,606.66
T	4 CYCLE	BALANCES	262,158	87,288	53,638	107,739	358,650	2,747,611
H	ROW PCT	9.5	3.2	2.0	3.9	13.1	61.3	100.0
	COL PCT	0.1	0.2	0.4	2.2	13.7	53.0	0.7
	TOT PCT	0.1	0.0	0.0	0.0	0.1	0.5	0.7
	AVG BAL	1,191.63	1,504.98	1,308.24	1,710.16	1,917.92	1,798.590	1,909.520
	5+CYCLE	BALANCES	307,772	60,894	9,668	14,695	47,729	3,503,386
	ROW PCT	8.8	1.7	0.3	0.4	1.4	42.6	100.0
	COL PCT	0.1	0.1	0.1	0.3	1.8	47.0	1.0
	TOT PCT	0.1	0.0	0.0	0.0	0.0	0.4	1.0
	AVG BAL	1,338.14	1,739.84	1,611.340	1,632.84	1,590.97	1,856.350	1,948.040
	1,824.68							
COLUMN	BALANCES	290,947,354	50,674,144	13,240,379	4,975,186	2,609,101	3,177,780	368,027,719
TOTALS	ROW PCT	79.1	13.8	3.6	1.4	0.7	0.9	100.0
	COL PCT	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	TOT PCT	79.1	13.8	3.6	1.4	0.7	0.9	100.0
	AVG BAL	432.58	1,346.50	1,506.64	1,616.37	1,748.73	1,825.260	1,834.940
	506.49							

Figure 14: The Delinquent Balance Status Transition Matrix by SPID and Digit Group report.

## Field Reference

The headings for the Delinquent Balance Status Transition Matrix by SPID and Digit Group report are Reporting Period, Strategic Portfolio ID and Name, and the Digit Group. Table 10 shows the fields in the report.

Table 10: Fields in Report: Delinquent Balance Status Transition Matrix by SPID and Digit Group.

<b>Row headings:</b>	
From: Prior Month	Account status from the prior month.
Column Totals	Balance for the column and the corresponding percentages and average balance.
<b>Column headings:</b>	
To: Current Active	Account has moved into the current month. The first six columns correspond to the first six rows and create the matrix. These labels indicate the level of delinquency.
Current Active	Balance of accounts that have a non-zero balance and that are not delinquent.
1-Cycle	Balances that are currently 1-cycle delinquent.
2-Cycle	Balances that are currently 2-cycles delinquent.
3-Cycle	Balances that are currently 3-cycles delinquent.
4-Cycle	Balances that are currently 4-cycles delinquent.
5+ Cycle	Balances that are currently 5 or more cycles delinquent excluding charged-off accounts.
Charge-off	Balances that are charged-off this month. Accounts charged-off in the prior month do not appear in the report.
Balance Details	Each cell of the matrix shows details about the balances.
Balances	Balance associated with the cell.
Row Percent	Cell balance as a percentage of the total row balance.
Column Percent	Cell balance as a percentage of the total column balance.
Total Percent	Cell balance as a percentage of the total balance for this page of the report.
Average Balance	Average cell balance.
Row Totals	Total balance for the row and the corresponding percentages and average balance.

## Delinquent Collections Estimator Reports

For Delinquent Collections strategies, the Expected Processing Date is used in the calculation of Time-on-Books and for all other strategy keys that require a processing date. See the *TRIAD Table Maintenance Guide* for more information about setting up Estimator Control parameters.

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

A sample Delinquent Collections Strategy Table Estimator - Total Amount report is shown in figure 15 on page 170 and in figure 16 on page 171. A sample Delinquent Collections Strategy Table Estimator - Average Amount report is shown in figure 17 on page 172. A sample Delinquent Collections Scenario Estimator - Total Amount report is shown in figure 18 on page 173. All Delinquent Collections Estimator reports use the same reporting matrix, which is shown in table 11 on page 174.

As noted earlier, the % of Row report is not particularly useful in Delinquent Collections, unless there is interest in knowing the percent of accounts in each row that are scored.

TRIAD DEMO SERVICES REPORT ID : SAAIDERP-15-5.0C PROCESSING DATE : 11/02/1997						TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE DELINQUENT COLLECTIONS ESTIMATOR REPORT STRATEGY TABLE - TOTAL AMOUNT REPORT				PAGE NO : 1 RUN DATE : 04/15/1998 RUN TIME : 14:49:27	
STRATEGY ID:		101									
----- STRATEGY KEYS -----											
ROW NUMBR	CYCLES DELQ	SINCE PAYMENT	MOB ON BOOKS	BALANCE	BEHAVR SCORE	RISK SCORE	# ACCTS CURR BALANCE		# SCORED ODDS		SCEN ID
001	***	***	***	***	***	***					001
							\$	0	0		
							US\$	0.00	0.00		
002	1	***	***	***	***	***					002
							\$	7	7		
							US\$	2,218.31	0.28		
003			12	***	***	***					004
							\$	73	70		
							US\$	8,265.63	1.03		
004					520	***					003
							\$	202	202		
							US\$	20,080.50	15.42		
005				200	***	***					007
							\$	147	142		
							US\$	48,744.38	0.85		
006					530	***					006
							\$	39	39		
							US\$	12,932.19	7.40		
007						500					005
							\$	4	4		
							US\$	1,233.25	6.09		
008						660					004
							\$	20	20		
							US\$	6,373.62	7.22		
009					550	***					005
							\$	114	114		
							US\$	38,552.67	32.79		
010						600					004
							\$	19	19		
							US\$	5,571.65	14.19		
011				500	***	***					008
							\$	178	169		
							US\$	167,990.99	1.80		
012					540	***					007
							\$	55	55		
							US\$	50,466.88	9.03		

Figure 15: A sample Delinquent Collections Strategy table - Total Amount report, page one.



## 8: Delinquent Collections

TRIAD DEMO SERVICES				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 2			
REPORT ID : SANADERP-15-5.0C				DELINQUENT COLLECTIONS ESTIMATOR REPORT				RUN DATE : 04/15/1998			
PROCESSING DATE : 11/02/1997				STRATEGY TABLE - TOTAL AMOUNT REPORT				RUN TIME : 14:49:27			
STRATEGY ID: 101											
----- STRATEGY KEYS -----											
PCYMS	CYCLES	DAYS	HOS	BEHAVA	CB						
ROW	DELQ	SINCE	ON	SCORE	RISK						
NUMBR	PAYMENT	BOOKS	BALANCE	SCORE	SCORE	SCEN ID					
-----											
						# ACCTS	# SCORED				
						CURR BALANCE	ODDS				
014				660				005			
						#	2	2			
						US\$	1,284.19	9.67			
015				560	***			004			
						#	151	151			
						US\$	151,094.88	36.12			
016	999	***	***	***	***			002			
						#	20	11			
						US\$	274.25	12.69			
017	2	***	***	***	***			009			
						#	9,499	1,035			
						US\$	3,868,073.75	0.84			
-----											
EVALUATED						#	10,531	2,041			
						US\$	4,383,663.67	1.64			
EXCLUDED						#	5,207	5,022			
						US\$	1,384,494.91	4.79			
TOTAL						#	15,738	7,063			
						US\$	5,768,158.58	3.30			

Figure 16: A sample Delinquent Collections Strategy table - Total Amount report, page two.

TRIAD 5.0 User's Guide

TRIAD DEMO SERVICES						TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 4			
REPORT ID : SAMADERP-15-5.0C						DELINQUENT COLLECTIONS ESTIMATOR REPORT				RUN DATE : 04/15/1996			
PROCESSING DATE : 11/02/1997						STRATEGY TABLE - AVERAGE AMOUNT REPORT				RUN TIME : 14:49:27			
STRATEGY ID: 101													
----- -----S T R A T E G Y K E Y S----- -----													
PCYMS		DAYS	MOS		CB							SCEN	
NUMBR	CYCLES	SINCE	ON	BEHAVR	RISK							ID	
	DELQ	PAYMENT	BOOKS	SCORE	SCORE								
-----													
							# ACCTS		# SCORED				
							CURR BALANCE		ODDS				
001	***	***	***	***	***	***						001	
							\$	0	0				
							US\$	0.00	0.00				
002	1	***	***	***	***	***						002	
							\$	7	7				
							US\$	316.90	0.28				
003			12	***	***	***						004	
							\$	73	70				
							US\$	113.23	1.03				
004				520	***							003	
							\$	202	202				
							US\$	99.41	15.42				
005			200	***	***							007	
							\$	147	142				
							US\$	331.59	0.85				
006				530	***							006	
							\$	39	39				
							US\$	331.59	7.40				
007				600								005	
							\$	4	4				
							US\$	308.31	6.89			004	
008				660									
							\$	20	20				
							US\$	318.68	7.22				
009				550	***							005	
							\$	114	114				
							US\$	330.19	32.79				
010				600								004	
							\$	19	19				
							US\$	293.24	14.19				
011			500	***	***							008	
							\$	178	169				
							US\$	943.77	1.80				
012				540	***							007	
							\$	55	55				
							US\$	917.58	9.83				
013				600								006	

Figure 17: A sample Delinquent Collections Strategy table - Average Amount report.

## 8: Delinquent Collections

TRIAD DEMO SERVICES										TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE.										PAGE NO : 1		
REPORT ID : SAMADERF-20-5.0C										DELINQUENT COLLECTIONS ESTIMATOR REPORT										RUN DATE : 04/15/1998		
PROCESSING DATE : 11/02/1997										SCENARIO TABLE - TOTAL AMOUNT REPORT										RUN TIME : 14:49:27		
STRATEGY ID:		101																				
----- SCENARIO DEFINITIONS -----																						
STMT		ACTION 1						ACTION 2						ACTION 3								
SCEN	MSG	STMT	COLL			BLK	LTR	COLL			BLK	LTR	COLL			BLK	LTR					
ID	ID	INSRT	DAY	END	CDE	ID	DAY	END	CDE	ID	DAY	END	CDE	ID	DAY	END	CDE	ID				
-----																						
																		# ACCTS	# SCORED			
																		CURR BALANCE	ODDS			
002			00			Q01														#	27	18
																		US\$	2,492.56	1.86		
003			20			L01														#	202	202
																		US\$	20,080.50	15.42		
004			10			L02														#	263	260
																		US\$	171,305.78	5.16		
005			20			Q02														#	120	120
																		US\$	41,070.11	28.50		
006			15			Q02														#	40	40
																		US\$	13,438.72	7.45		
007			10			Q03														#	202	197
																		US\$	99,211.26	1.40		
008			05			Q03														#	178	169
																		US\$	167,990.99	1.80		
009			00			Q04														#	9,499	1,035
																		US\$	3,868,073.75	0.84		
-----																						
EVALUATED																		#	10,531	2,041		
																		US\$	4,383,663.67	1.64		
EXCLUDED																		#	5,207	5,022		
																		US\$	1,384,494.91	4.79		
TOTAL																		#	15,738	7,063		
																		US\$	5,768,158.58	3.30		

Figure 18: A sample Delinquent Collections Scenario table - Total Amount report.

Table 11: Fields in Reports: Delinquent Collections Estimator.

<b>Row headings:</b>	
Evaluated	All accounts that are delinquent and do not meet an exclusion criteria.
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and assigned to strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Evaluated + Excluded + Stgy 999 (where shown) = Total
<b>Column Headings:</b>	
# Accts	Tally of all accounts.
Curr Balance	Tally of associated current balance (in specified currency).
# Scored	Subset of the accounts tallied above, the number that had a behavior score in the min to max range as specified in the PC Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.
Odds	Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. 9,999 is a special case meaning there were no bad accounts. Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one. For more information on odds, see the chapter <i>Behavior Scoring</i> in this manual.

## 9: Overlimit Collections

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### About the Overlimit Collections Decision Area

The Overlimit Collections decision area treats accounts that are overlimit but not delinquent. Accounts that are both overlimit and delinquent are treated in the Delinquent Collections decision area. TRIAD takes action on overlimit accounts at cycle and throughout the month. Table 1 shows the components of the Overlimit Collections decision area.

All non-excluded accounts are processed through a series of user-defined filters, called triggers. When a trigger activates a review, TRIAD searches the strategy table, retrieves the appropriate scenario, and returns the actions to the calling program for implementation.

If TRIAD takes overlimit actions at cycle and a new credit line has been calculated, it uses the new credit line as a base for the utilization calculation and in the calculations that determine breakpoint crossing.

Each Overlimit Collections scenario is a unique event with one set of actions. This contrasts with Delinquent Collections, which may have up to three sets of actions in a single scenario. Breakpoints function in Overlimit Collections the same way that dynamic reclassification works in Delinquent Collections. Both can trigger an updated response to a changing account situation.

Table 1: Components of the Overlimit Collections decision area.

Configuring Options	Configure Overlimit Collections processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Overlimit Collections decision area.
Trigger Events	Determine timing for an action set to be taken.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Outcomes Reporting	Tallies and reports actions taken during the month.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

In the System Control table of the TRIAD Table Maintenance System three fields (see table 2) let you define how your installation processes overlimit accounts and treats overlimit accounts. For more information about these fields see the *Advanced Features* chapter in the *TRIAD Table Maintenance Guide*.

These field values are determined during the TRIAD design meetings. They should not be altered without consulting your Fair, Isaac representative.

Table 2: Configuring options in the Overlimit Collections Processing decision area.

Field Name	Table	Description
Cash Line Process Indicator	System Control	Signals TRIAD to use separate cash line and cash balances, when they are available, in both the Overlimit Collections and Credit Line decision areas.
Cash Line Reporting Indicator	System Control	Controls the production of cash line reports. The reports can be suppressed, produced using cash lines and cash balances, or produced using credit lines and cash balances.
Defer OVLM Action until Posting	System Control	Indicates whether actions in the Overlimit Collections decision area should occur at cycle or be deferred until the first posting after cycle.

## Exclusions

You can exclude categories of accounts from Overlimit Collections. For example, delinquent accounts are excluded from TRIAD Overlimit Collections treatment. Exclusions in each decision area are for that area only. An account excluded from Overlimit Collections can be processed in other areas such as Delinquent Collections and Authorizations. In fact, delinquent accounts are excluded from Overlimit Collections and processed in Delinquent Collections even if they are overlimit.

Each time an overlimit account calls TRIAD, it is first checked for membership in an exclusion category. For example, an account crosses an overlimit breakpoint in daily processing and is treated. The next day the card is stolen and its status is changed. If a status of stolen is an exclusion from overlimit collections, the account will not be treated, even if the account balance increases and it is further overlimit.

Exclusion decisions are made in the design meetings with your Fair, Isaac representative.

## Overlimit Collections Triggers

In Overlimit Collections, the primary trigger is the account condition. If an account is overlimit and not delinquent, TRIAD is called to review the account and assign actions. Once the account is under TRIAD's control, reviews are triggered when an account crosses an overlimit breakpoint.

### Percent Utilization (Breakpoint) Triggers

Breakpoint triggers are a fundamental concept in Overlimit Collections. A breakpoint is a monetary amount over the credit limit or a percent utilization which establishes a threshold. When this threshold is met or exceeded, it triggers a search of the Overlimit Strategy table. The Overlimit breakpoints are located in the Overlimit Parameters table, as shown in figure 1.

The screenshot shows a window titled "Overlimit Parameters". Inside, there is a field for "Environmental Name" with the value "TEST". Below this, "Strategy ID" is set to "100" and the strategy is "Demo Overlimit Strategy". A "Close" button is visible. The "Overlimit Triggers" section contains two sub-sections: "Amount Breakpoint" with a value of "0000-100", and "% Utilization Breakpoints" which lists four values: "105", "110", "120", and "130".

Figure 1: Overlimit breakpoints in the Overlimit Parameters table.

Overlimit breakpoints are assigned for each Strategy ID. There are two types of breakpoints, Amount and Utilization (see table 3).

Table 3: Overlimit breakpoints.

Amount Breakpoint	When accounts are over their line by this amount, they are treated by an Overlimit Collections scenario.
Utilization Breakpoints	When accounts are over their line by these percentages, they are treated by an Overlimit Collections scenario.

Amount Breakpoint and the first Percent Utilization breakpoint work together to initiate the first overlimit treatment. The breakpoint that is reached first triggers the overlimit action. The other breakpoint is then ignored. Subsequent overlimit treatment is initiated when the second, third and fourth utilization breakpoints are crossed. The same breakpoint can be crossed more than once if a payment posted is followed by new charges.

## Crossing a Breakpoint

The expression, "crossing a breakpoint" has a precise definition. To cross a breakpoint, the account's balance or utilization before posting must be less than the designated breakpoint; its balance or utilization after posting must be equal to or greater than the breakpoint. Accounts can cross multiple breakpoints during one review session. When this occurs the breakpoint of the highest severity is used in reporting. For example, consider an account with the following profile:

Current credit line	\$ 1000 .00
Pre-post balance	\$ 975 .00
Amount posted tonight	+\$ 80 .00
Balance after post	\$ 1055 .00

Figure 2: Crossing an Overlimit breakpoint using credit line.

The overlimit breakpoints are:

Amount Breakpoint	Percentage Utilization 1	Percentage Utilization 2	Percentage Utilization 3	Percentage Utilization 4
\$50.00	110	115	120	120
\$1050.00	\$1100.00	\$1150.00	\$1200.00	\$1200.00

Figure 3: Credit amounts calculated at breakpoints.

The current credit line is \$1000.00. The Amount Breakpoint adds \$50.00 to the current credit line, resulting in an amount of \$1050.00. Percentage Utilization Breakpoint 1 is 110% of the current Credit Line, which equals \$1100.00. The balance after post is \$1055.00, which causes the account to cross the Amount Breakpoint. Crossing the breakpoint triggers entry into the strategy and scenario tables. Because the first triggering event was the Amount Breakpoint, Percentage Utilization Breakpoint 1 is disregarded. The next triggering event will be the crossing of Percentage Utilization Breakpoint 2. It will occur when the balance after posting is equal to or greater than \$1150.00.



Notice that the next two breakpoints are set to the same value, 120. If you do not to use all four percentage breakpoints, set the unused ones to the last-used value.

## Cash Lines

If your installation maintains separate cash lines and cash balances, you can treat an account that is over its cash line just as you treat an account over its credit line. The difference is that the cash line, not the credit line, is used in the calculations. If the account is over its credit line, first it is evaluated using credit line and associated credit amounts. If it fails to cross a breakpoint, it is then evaluated using its cash line and associated cash amounts. For example, if the cash line is \$3,000 and the credit line is \$5,000, the breakpoints from the previous example would result in the amounts shown in figure 4:

Amount Breakpoint	Percentage Utilization 1	Percentage Utilization 2	Percentage Utilization 3	Percentage Utilization 4
\$50.00	110%	115%	120%	120%
\$3,050.00	\$3,300.00	\$3,450.00	\$3,600.00	\$3,600.00

Figure 4: Cash amounts calculated at breakpoints.

## Credit Line Tally or Cash Line Tally?

If an account crosses both a credit line and a cash line breakpoint simultaneously, where is the crossing tallied? The answer is: In the over credit line reports. If both are crossed at the same time, the crossing is tallied in the over credit line reports.

## Overlimit Collections Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. You build strategy trees in the TRIAD Table Maintenance System.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

### Table and Tree

An Overlimit Collections Strategy table has three parts: Strategy ID, key fields, and scenarios. Each has a particular function, as follows:

- A Strategy ID links a set of strategy keys to its corresponding strategy table.
- Strategy table keys define conditions causing an account to be assigned a particular scenario.
- Scenarios define treatments applied to the account.

Whether you view your Overlimit Collections strategy as a table (figure 5) or a tree (figure 6) you can see a one-to-one correspondence of each table row and each tree branch. Both rows and branches consist of key values and a resulting action.

Overlimit Strategy

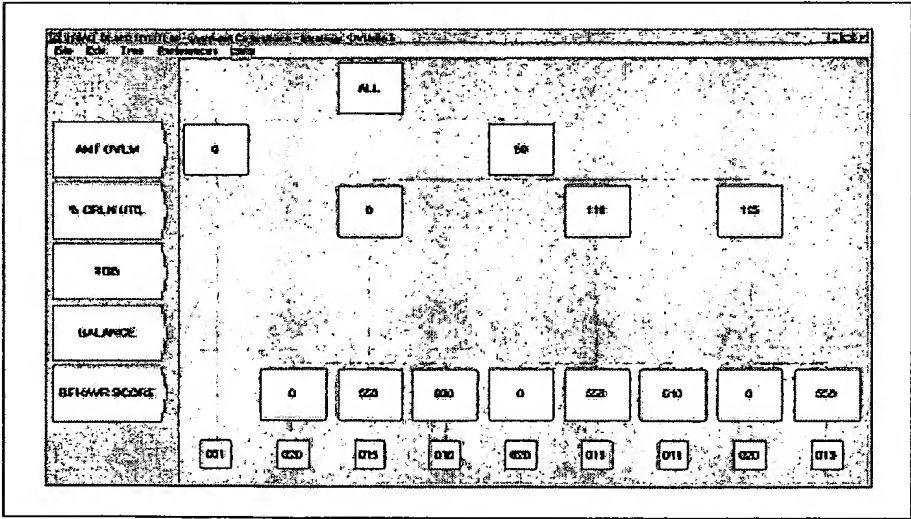
Enforcement Name: TEST

Strategy:  Test Strategy:

SCEN ID	AMT OVLN	CREDIT LINE UTIL	TIME ON BOOKS	BALANCE	BEHAVE SCORE
001	1	000000	000000	000000	000000
020	4	000000	000000	000000	000000
015	3	000050	000000	000000	000050
016	1	000050	000000	000000	000050
020	4	000050	000010	000000	000000
013	3	000050	000010	000000	000050
011	3	000050	000010	000000	000050
020	3	000050	000015	000000	000000
013	3	000050	000015	000000	000050

11/11/2000 10:00:00

Figure 5: The Overlimit Collections Strategy table.



## Sample Strategy Keys

The keys described in this section (see table 4) may be used in the Overlimit Collections treatment area. They are defined during design meetings with your Fair, Isaac representative. Consequently, the keys described in this section may differ from those used in your installation. Consult the *TRIAD Project Guide* for a description of the keys used in your implementation of Overlimit Collections.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among strategies in a decision area. The maximum number of keys in a strategy is fifteen. However, you need only select the keys needed for your strategy. Strategy keys can have numeric, alphabetic and alphanumeric values. Numeric values can be either positive or negative.

Table 4: Frequently Used Overlimit Collections strategy keys.

Time-On-Books	Number of months an account has been open This number is often one-relative; that is, one is added to the calculation so that the first month it is open, Time-on-Books equals one.
Amount Overlimit	Amount the account is over its credit limit.
%Credit Line Used	Current balance expressed as a percent of the credit line When the number is greater than 100%, the account is overlimit. Accounts that are both overlimit and delinquent are treated in Delinquent Collections.
%Cash Line Used	Current cash balance expressed as a percent of the cash line.  Sometimes this key reflects cash usage as a percent of the credit line, if separate cash lines are not available.
Outstanding Balance	Current balance of the account with or without disputed balances and outstanding authorizations.
Behavior Score	Account's behavior score.
Balance-at-Risk	Current balance multiplied by the probability of the account going bad.
Credit Bureau Score	Account's credit bureau score.

## Overlimit Scenarios

The Overlimit Collections scenarios define actions taken on accounts. They can occur at cycle or throughout the month during daily posting. Actions dependent upon a statement, such as printing a statement message or including a statement insert, occur only at cycle.

TRIAD can take the following Overlimit Collections actions:

- Print a statement message (monthly billing only)
- Include a statement insert (monthly billing only)
- Send a letter
- Set a block code
- Queue an account for collections
- Take no action at all (all action fields set to blanks)

All Overlimit Collections strategies use scenarios from the Overlimit Collections Scenario table. The table is delivered with a capacity for 999 scenarios. See your *TRIAD Project Guide* for the number selected for your installation. The Scenario ID identifies the scenario in the strategy and scenario tables. The block codes and collection indicators used in Overlimit Collections scenarios are the same ones used in Delinquent Collections. Since each set of Overlimit Collections actions is a stand-alone event, TRIAD does not check for increasing severity as is done in Delinquent Collections.

Table 5 shows the two scenarios reserved for special use:

Table 5: Special use scenarios.

Scenario 000	Used in reporting to identify accounts not assigned to a scenario at posting due to no breakpoint crossed. It appears on the Overlimit Outcomes by SPID, Digit Group and Scenario ID report.
No-action Scenario	Identifies the scenario in which no action is taken. The non-action scenario is user-defined. It can be any scenario between 001 and 999.

## Scenario Fields

The Overlimit Collections scenarios in figure 7 shows an example of the actions available for treatment of overlimit accounts.

Scenario ID	Description	Statement Message	Statement Insert	Collection Indicator	Block Code	Letter
001	No Action					
002	Overlimit Scenario 002 - High behavior score, slightly overlimit. include card upgrade insert, schedule for courtesy call from collector	11	OV05	651		
003	Overlimit Scenario 003 - Low behavior score, overlimit. block further purchases and send letter			650	P	L81

Figure 7: The Overlimit Collections Scenarios table.

TRIAD provides two cycle-only actions: printing a statement message and including a statement insert. An account does not need to cross a breakpoint to trigger these two actions; it merely needs to be overlimit. The other actions can be taken throughout the cycle, at cycle billing or any other time during the cycle. The scenario fields are shown in table 6 on page 185. See the *TRIAD Project Guide* for descriptions of how these fields have been implemented at your installation.

Table 6: Overlimit Collections Scenario fields.

<b>ID</b>	Identifies the Overlimit Collections scenario.
<b>Description</b>	Provides a place for a description of the scenario.
<b>Statement Message</b>	Identifies a message to be printed on the account holder's statement. This field is available only at cycle. If a statement message is not used, leave this field blank.
<b>Statement Insert</b>	Identifies a statement insert. This field is available only at cycle. Leave this field blank if statement inserts are not used for this scenario. To use a statement insert, the Produce Statement Insert switch in the System Control table of the TRIAD Table Maintenance System must be set to 1.
<b>Collection Indicator</b>	Identifies a collection activity such as assignment to a specific queue, dialer, or collector. Collection Indicator severity is not checked in Overlimit Collections scenarios. Leave this field blank if the scenario does not use a Collection Indicator.
<b>Block Code</b>	Identifies a block or status code such as block authorizations or pick-up card. Block Code severity is not checked in Overlimit Collections scenarios. Leave this field blank if the scenario does not use a Block Code.
<b>Letter</b>	Identifies a letter to be sent to the cardholder. Letters are not checked for severity. Leave this field blank if you do not want to use a letter in the scenario.

## Overlimit Outcomes Reporting

TRIAD records information about monthly cycle and daily processing actions throughout the month. Each time an action is taken, a record is written to the Report Record file. At the end of the month, all the information is tallied and summarized for reporting. Collectively, these reports are known as the Outcomes or Cycle Tally reports.

The Overlimit Outcomes reports show the effects of the strategies on accounts in terms of breakpoints crossed, actions taken, and operational impact. Because the reports are summarized by digit group, you can easily compare Champion and Challenger strategies. There are four types of Overlimit Collections Cycle Tally Outcomes reports:

- Over Credit Line Outcomes by SPID and Digit Group
- Over Cash Line Outcomes by SPID and Digit Group
- Over Credit Line Outcomes by SPID, Digit Group, and Scenario
- Over Cash Line Outcomes by SPID, Digit Group, and Scenario

The report matrices for the credit line and cash line varieties of the reports are identical.

## Production Schedule

Cycle Tally Outcomes reports are produced once a month, typically at month-end. If needed, they can also be produced daily or weekly. Under normal conditions, monthly reports are sufficient. However, during the first month of a new strategy you may want daily or weekly tallies.

Reports are produced by SPID and digit group. There is a report for each SPID, as well as one that totals all SPIDs.

Reporting period spans the period from the first cycle or daily record in the file until the last. Each report title contains the first and last date for the included data.



## Outcomes by SPID and Digit Group

The Over Credit Line Outcomes by SPID and Digit Group and Over Cash Line Outcomes by SPID and Digit Group reports present Overlimit Collections activities such as the number of accounts examined, breakpoints crossed, and actions taken. This report can help you determine the relative cost and benefits of different Champion and Challenger strategies.

Figure 8 shows a sample Over Credit Line report.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE							PAGE NO : 368				
REPORT ID : TRDC60CP-26-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997							RUN DATE : 08/02/1997				
				OVER CREDIT LINE OUTCOMES BY SPID AND DIGIT GROUP							RUN TIME : 23:39:26				
STRATEGIC PORTFOLIO ID: --												NAME:		ALL	
DIGIT OVERLIMIT NO BKPT				NEW				BREAKPOINT CROSSED				ACTION			
GROUP REVIEWED CROSSED				OVERLIMIT AMT BKPT BKPT-1 BKPT-2 BKPT-3 BKPT-4				MESSAGE INSERT LETTER BLOCK COLLECT							
00-49	3,440	2,398	1,816	178	289	575	0	0	175	0	741	246	595		
50-59	509	363	273	33	40	73	0	0	29	0	93	33	67		
60-69	472	318	259	24	39	91	0	0	28	0	104	36	89		
70-79	461	293	250	31	46	91	0	0	20	0	111	35	90		
80-89	495	355	269	30	33	77	0	0	28	0	102	43	86		
90-99	427	305	243	25	31	66	0	0	25	0	94	39	76		
TOTAL	5,804	4,032	3,110	321	478	973	0	0	305	0	1,245	432	1,003		

Figure 8: The Over Credit Line Outcomes by SPID and Digit Group report.

Report headings for Over Credit Line Outcomes by SPID and Digit Group and Over Cash Line Outcomes by SPID and Digit Group reports contain: Reporting Period, Strategic Portfolio ID and Name, and Digit Group. See table 7 for a description of fields in the reports.

Table 7: Fields in Reports: Over Credit Line Outcomes by SPID and Digit Group and Over Cash Line Outcomes by SPID and Digit Group.

Row headings:	
Digit Group	Random digit group ranges
Total	Total for all digit groups
Column headings:	
Overlimit Reviewed	Total number of times TRIAD examined accounts that were over their credit line or over their cash line.
No Breakpoint Crossed	Total number of times TRIAD examined overlimit accounts, but a breakpoint was not crossed.
New Overlimit	Number of times accounts went from under a credit or cash line to over the credit or cash line.

Table 7: Fields in Reports: Over Credit Line Outcomes by SPID and Digit Group and Over Cash Line Outcomes by SPID and Digit Group. (continued)

Breakpoint Crossed	Heading for the breakpoint summarization data. Accounts are tallied in the breakpoint category that represents the highest breakpoint crossed at each examination. For example, if an account crossed the first and second breakpoints at the same posting, its crossing would be tallied in the Breakpoint-2 column. Crossing a breakpoint is tallied even if the Defer Overlimit Action Until Posting switch is set to 1 (defer).
Amount Breakpoint	Number of times the Amount Breakpoint was the highest breakpoint crossed.
Breakpoint-1	Number of times the first utilization breakpoint was the highest breakpoint crossed by accounts in the digit group.
Breakpoint-2	Number of times the second utilization breakpoint was the highest breakpoint crossed.
Breakpoint-3	Number of times the third utilization breakpoint was the highest breakpoint crossed.
Breakpoint-4	Number of times the fourth utilization breakpoint was the highest breakpoint crossed.
Action	Heading for the actions taken.
Message	Number of times a statement message was printed.
Insert	Number of times a statement insert was sent.
Letter	Number of cardholders to whom a letter was sent.
Block	Number of accounts on which a block code was placed.
Collect	Number of accounts that were sent to collections.

## Outcomes by SPID, Digit Group, and Scenario

The Over Credit Line Outcomes by SPID, Digit Group, and Scenario and Over Cash Line Outcomes by SPID, Digit Group, and Scenario reports present Overlimit Collections activities by SPID and scenario. The activities look at the number of accounts examined, breakpoints crossed and actions taken. This report can help you determine the relative cost and benefits of different Champion and Challenger strategies.

Figure 9 shows a sample credit line version of the report.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE							PAGE NO : 98				
REPORT ID : TRDC60CP-27-V5.0				REPORTING PERIOD - 04/01/1997 THRU 04/30/1997							RUN DATE : 05/01/1997				
				OVER CREDIT LINE OUTCOMES BY SPID, DIGIT GROUP AND SCENARIO							RUN TIME : 10:35:29				
STRATEGIC PORTFOLIO ID: --											NAME:				ALL
DIGIT GROUP : 00 - 99															
SCENARIO OVERLIMIT NO BKPT NEW BREAKPOINT CROSSED ACTION															
ID	REVIEWED	CROSSED	OVERLIMIT	AMT BKPT	BKPT-1	BKPT-2	BKPT-3	BKPT-4	MESSAGE	INSERT	LETTER	BLOCK	COLLECT		
-----															
000	3	3	1	0	0	0	0	0	0	0	0	0	0		
001	5	1	5	0	0	2	0	2	0	0	0	0	0		
012	1	0	1	1	0	0	0	0	1	0	1	1	0		
014	3	0	0	0	0	0	0	3	2	0	3	3	0		
-----															
TOTAL	12	4	7	1	0	2	0	5	3	0	4	4	0		

Figure 9: The Over Credit Line Outcomes by SPID, Digit Group and Scenario report.

## Field Reference

Report headings for the Over Credit Line Outcomes by SPID, Digit Group, and Scenario ID and Over Cash Line Outcomes by SPID, Digit Group, and Scenario ID reports contain: Reporting Period, Strategic Portfolio ID and Name, and Digit Group. See table 8 for a description of fields in the reports.

Table 8: Fields in Reports: Over Credit Line Outcomes by SPID, Digit Group and Scenario ID and Over Cash Line Outcomes by SPID, Digit Group, and Scenario ID.

<b>Row headings:</b>	
Scenario ID	Identification number of the scenario.
Total	Total for all scenarios.
<b>Column headings:</b>	
Overlimit Reviewed	Total number of times TRIAD examined accounts which were over their credit line or over their cash line.
No Breakpoint Crossed	Total number of times TRIAD examined overlimit accounts in which there was monetary activity, but a breakpoint was not crossed.
New Overlimit	The number of times accounts treated by the given scenario went from under a credit or cash line to over the credit or cash line.

Table 8: Fields in Reports: Over Credit Line Outcomes by SPID, Digit Group and Scenario ID and Over Cash Line Outcomes by SPID, Digit Group, and Scenario ID. (continued)

Breakpoint Crossed	Heading for the breakpoint summarization data. Accounts are tallied in the breakpoint category that represents the highest breakpoint crossed at each examination. For example, if an account crossed the Amount Breakpoint and Percent Utilization 2 breakpoint at the same posting, its crossing would be tallied in the Breakpoint-2 column. Note: Crossing a breakpoint is tallied even if the Defer Overlimit Action Until Posting switch is set to 1(defer).
Amount Breakpoint	Number of times the Amount Breakpoint was the highest breakpoint crossed.
Breakpoint-1	Number of times the first utilization breakpoint was the highest breakpoint crossed.
Breakpoint-2	Number of times the second utilization breakpoint was the highest breakpoint crossed.
Breakpoint-3	Number of times the third utilization breakpoint was the highest breakpoint crossed.
Breakpoint-4	Number of times the fourth utilization breakpoint was the highest breakpoint.
Action	Heading for the actions taken
Message	Number of times a statement message was printed.
Insert	Number of times a statement insert was sent.
Letter	Number of cardholders to whom a letter was sent.
Block	Number of accounts on which a block was placed.
Collect	Number of accounts sent to collections.

## Overlimit Collections Estimator Reports

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

The Overlimit Collections Estimator reports all use the same reporting matrix (see table 9).

Table 9: Fields in Reports: Overlimit Collections Estimator.

Row headings:	
Over LICR	Accounts treated in Overlimit Collections decision area because their current balance exceeds their credit line. Tally also includes accounts that exceed both their credit line and their cash line.
Over LICS	Accounts treated in Overlimit Collections decision area because their current cash balance exceeds the cash line, but their current balance does not exceed their credit line.
Not Overlimit	Accounts not treated due to current balance equal to or less than credit line, and (if applicable) current cash balance equal to or less than cash line.
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Overlimit + Not Overlimit + General Exclusion + Strategy 999 (where shown) = Total
Column Headings:	
Fields	If you process cash lines in Overlimit Collections, credit line statistics will be followed by cash line statistics.
Line	Tally of all accounts and associated Credit Line/Cash Line (in specified currency).
Difference	Tally of all accounts and the amount over/under limit (in specified currency). This is the difference between the current credit/cash balance and the account's credit/cash line. If the account is under limit, the difference is negative.
# Scored	Subset of the accounts tallied above. This is the number of accounts that had a behavior score in the min to max range as specified in the Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.

Table 9: Fields in Reports: Overlimit Collections Estimator. (continued)

Odds	<p>Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. 9,999 is a special case meaning there were no bad accounts.</p> <p>Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one.</p> <p>For more information on odds, see the chapter on <i>Behavior Scoring</i> in this manual.</p>
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# 10: Authorizations

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## About the Authorizations Decision Area

The Authorizations decision area helps you make authorization decisions about transactions that present both opportunity and risk. These transactions belong to accounts that are at a low level of delinquency or are overlimit, conditions that may previously have been the cause for an automatic decline. Table 1 on page 194 shows the components of the Authorizations decision area.

There is more to managing authorizations than accepting, declining, or referring a transaction. The system also calculates user-defined exposure parameters, called shadow limits or cushions. You can calculate different cushion amounts for cash and merchandise transactions, holiday and non-holiday periods. You can also define one supplemental action for accepted transactions and up to three supplemental actions for declined or referred transactions.

Like the other decision areas, Authorizations records its actions for reporting. TRIAD returns a record of each decision it makes to add to the Authorization Log file. At a later time, either daily, weekly or once a month, your system reads the Authorization Log file and creates TRIAD reporting files. The TRIAD reporting programs create summary and outcomes reports for the Authorizations decision area. There is also a transaction-based Estimator report.

The accept, decline, or refer decision occurs during transaction processing. But other actions at other times also support the decision-making process:

- When a new account is opened, it is assigned a SPID, a random digit, and an Authorization Strategy ID.
- During cycle processing, each account is assigned an Authorization Strategy ID.
- At authorization time, selected accounts may be assigned an Authorization Strategy ID.
- At reporting, the actions are tallied and reported.

This chapter examines the general case for the Authorizations decision area. Your installation may differ. See the *TRIAD Project Guide* for specific information about implementing this decision area at your installation.

Table 1: Components of the Authorizations decision area.

Configuring Options	Configure Authorizations processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Authorizations decision area.
Trigger Events	Signal the condition for an action set to be taken.
Strategies	Evaluate accounts and transactions and assign the appropriate scenario.
Scenarios	Specify actions to be taken on selected transactions.
Outcomes Reporting	Tally actions taken during the month, including a summary of decisions made by TRIAD and the host system.
Estimator Reporting	Provides a count of the transactions and associated account odds for each row of the control tables.

## Configuring Options

The fields discussed in this section (see table 2) let you configure the Authorizations decision area for your installation. For more information about setting the fields, see the *Advanced Features* chapter in the *TRIAD Table Maintenance Guide*. See the *TRIAD Project Guide* for information about the initial values chosen, such as Transaction Types.

Table 2: Configuring options in the Authorizations decision area.

Field Name	Table	Description
Do Authorization Processing	System Control	Enables or disables Authorizations processing.
Auths Estimator Sample Pct/Report Type	SPID Control	The percentage of transactions in this report type input to the Authorizations Estimator reports. If your installation does not use the Authorizations decision area, these fields are gray and you cannot enter data.



## Exclusions

You can exclude categories of accounts from Authorizations at cycle or at transaction processing. A bankrupt account might be excluded at cycle because they are automatic declines. A delinquent account might be excluded at transaction processing based on the account's conditions. For example, a 1-cycle account might be processed by TRIAD for an authorization decision, but a 2-cycle account might be an automatic decline and never reach the TRIAD system. Exclusion decisions are made in the design meetings with your Fair, Isaac representative.

Decision area exclusions are for that area only. An account may be excluded from Authorizations, but processed in other areas such as Delinquent Collections or Overlimit Collections.

## Authorization Triggers

The calling program controls which transactions are examined by TRIAD at authorization time. The logic is built into the call to the TRIAD program. Typically, TRIAD is called when the authorization decision is not clear; for example mildly delinquent accounts or accounts that are overlimit, but not delinquent. This call logic is the preliminary authorization trigger. Once a transaction is sent to TRIAD, a series of tests in the scenario trigger the final accept, decline, or refer decision.

## Scenario Triggers

Triggers for Authorizations actions are a part of the scenario. If a transaction has gone this far in the process, it has undergone a strategy table search. Trigger tests provide additional flexibility in judging the soundness of a transaction. In figure 1, the values in the Cushion Type, Cushion, and Percent Fit fields are tests that determine which transactions will be accepted and which will be declined or referred.

There are four sets of parameters in each scenario, two sets each under the headings of Regular and Holiday (see figure 1 on page 196). In TRIAD you can use different amounts for holiday and non-holiday periods. Holiday periods are defined by setting a Linkage parameter. See the *TRIAD Data Processing Guide* for a discussion of the Linkage parameter and its settings. In addition to regular and holiday credit limit settings, you can also vary the Cushion Type, Cushion and Percent Fit tests for credit and cash transactions.

Scenario Authorization Scenario

Environment Name: TEST

Scenario ID: 001 Scenario List Close

Description: Auth Scenario 001 - no cash, 125% util. holiday - same

**Cushion Calculation Parameters**

Normal Volumes				Holiday (High) Volumes			
	Type	Value	% Fit		Type	Value	% Fit
Credit:	D	0000125	095	Credit:	D	0000125	095
Cash:	Z	0000000	000	Cash:	Z	0000000	000

**Action If Within Cushion**

Approve Action: APV01

**Action(s) if Over Cushion**

Ref/Decline Reason	Action 2	Action 3
D 2	D	

Scenario ID: 002 Scenario List Close

Description: Auth Scenario 002 - 500 over line, 90% fit

**Cushion Calculation Parameters**

Normal Volumes				Holiday (High) Volumes			
	Type	Value	% Fit		Type	Value	% Fit
Credit:	D	0000500	090	Credit:	D	0000115	085
Cash:	D	0000500	090	Cash:	Z	0000000	000

**Action If Within Cushion**

Approve Action: APV02

**Action(s) if Over Cushion**

Ref/Decline Reason	Action 2	Action 3
D 2	DCTR2	1

Record 1 of 16

Figure 1: Sample Authorization Scenario parameters.

## Cushion Tests

TRIAD authorization logic first tests a transaction by checking if it is within the designated cushion. A cushion is a temporary extension of the available credit limit. It is also called a shadow limit, pencil limit, or pad. The cushion test has two elements, the Cushion Type and the Cushion Value.

The Cushion Type (see figure 2) defines how the test will be applied. It has four values. The same four values are used for Regular, Cash, Holiday, and Holiday Cash tests.

Utilization (U)	When Cushion Type = U, the Cushion is a percentage of the existing credit line. To allow exposure 10% above the credit line, enter U in Cushion Type and 110 in Cushion Value. You can also use this field to assign a value under the existing credit limit; for example, to allow exposure only up to 80% of the credit line, enter U in Cushion Type and 80 in the Cushion Value field.
Line (L)	When Cushion Type = L, the Cushion is a fixed amount that acts as a temporary credit line. To temporarily increase a credit line to \$5,000, enter L in Cushion Type and 5000 in Cushion Value.
Designated Amount (D)	When Cushion Type = D, the Cushion is designated an amount over the existing credit line. To allow exposure \$250 over the credit line, enter D in Cushion Type and 250 in Cushion Value.
Zero (Z)	When Cushion Type = Z, the credit line is set to zero for purposes of the transaction. Although this action does not alter the actual credit line, it does block purchases. To temporarily set a credit line to zero, enter Z in Cushion Type and 0 in Cushion Value.

Figure 2: Cushion Type values.

If you wish to disable the cushion tests, set Cushion Type to U and the Cushion Value to 100 or set Cushion Type to D and the Value to 0. This procedure applies to Normal Volumes, Cash, Holiday Volumes, and Holiday Cash Cushion tests.

For a transaction to fit within the Cushion, the entire amount of the transaction must be within the available credit for the account. If it is, it will be accepted. If it is not, the transaction proceeds to the Percent Fit test.

## Percent Fit Test

The Percent Fit test follows the Cushion test. It is applied to transactions that were not accepted as a result of the Cushion test. The Percent Fit test provides a second chance for transaction approval. Percent Fit means that a certain percentage of the transaction must fit within the available credit for the account. If it fits, it is accepted. If not, it is declined or referred according to the setting in the scenario. To bypass the Percent Fit test, enter 999 or zero in the field.

## How Cushion and Percent Fit Interact

The general interaction between Cushion and Percent Fit is the same for the four variations: regular credit, regular cash, holiday credit, and holiday cash. The places where there are differences are noted.

The Cushion determines by what amount a transaction may exceed the account's credit limit. For example, a cushion amount of \$100 means that a transaction could bring the account's balance \$100 over the credit limit and still be accepted. Similarly, a Cushion amount of 110% means that the transaction could bring the account's balance to an amount up to 10% over the credit limit and still be accepted.

If the transaction does not fit within Cushion, the Percent Fit test is applied. In this test, a percentage of the transaction must fit within the available credit. For example, if Percent Fit is set to 75, 75% of the current transaction must be within the available credit for the transaction to be accepted. If the transaction passes the Percent Fit test it is accepted. If not, it is declined or referred.

If your installation has cash lines, a cash transaction must fit within both the regular credit and cash tests for Cushion and Percent Fit. Figure 3 shows the order of testing for a cash transaction.

Cushion	If the transaction is within the Cushion amount, it is tested against the Cash Cushion amount, skipping the Percent Fit test. If it is not within the Cushion amount, it will be tested against the Percent Fit.
Percent Fit	If the transaction fits within the Percent Fit test, it is tested against the Cash Cushion amount. If it does not fit within the Percent Fit test, it will be declined or referred.
Cash Cushion	If the transaction fits within the Cash Cushion amount, it is accepted. If it does not fit within the Cash Cushion amount, it will be tested against the Cash Percent Fit.
Cash Percent Fit	If the transaction fits within the Cash Percent Fit, it is accepted. If it does not fit within the Cash Percent Fit test, it will be declined or referred.

Figure 3: Cushion and Percent Fit test interaction.

## Authorization Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. You build strategy trees in the TMS.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

## Table and Tree

An Authorizations Strategy table has three parts: Strategy ID, key fields, and scenarios. Each has a particular function, as follows:

- A Strategy ID links a set of strategy keys to its corresponding strategy table.
- Strategy table keys define conditions causing an account to be assigned a particular scenario.
- Scenarios define treatments applied to the account.

Whether you view your Authorizations strategy as a table (figure 4 on page 199) or a tree (figure 5 on page 200) you can see a one-to-one correspondence of each table row and each tree branch. Both rows and branches consist of key values and a resulting action.

SCEN ID	DATES	CREDIT LINE	TIME ON BOOKS	CREDIT LINE	STRATA SCORE	CS SCORE
002	1/1/000000	0100000	0000000	0000000	0000000	0100000
002	1/1/000000	0100000	0000004	0000000	0000000	0100000
003	1/1/000000	0100000	0000004	0000000	0100000	0100000
004	1/1/000000	0100000	0000004	0000000	0000000	0100000
003	1/1/000000	0100000	0000000	0000000	0000000	0000000
001	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000
004	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000
003	1/1/000000	0100000	0000004	0000000	0000000	0000000

Figure 4: The Authorization Strategy table.

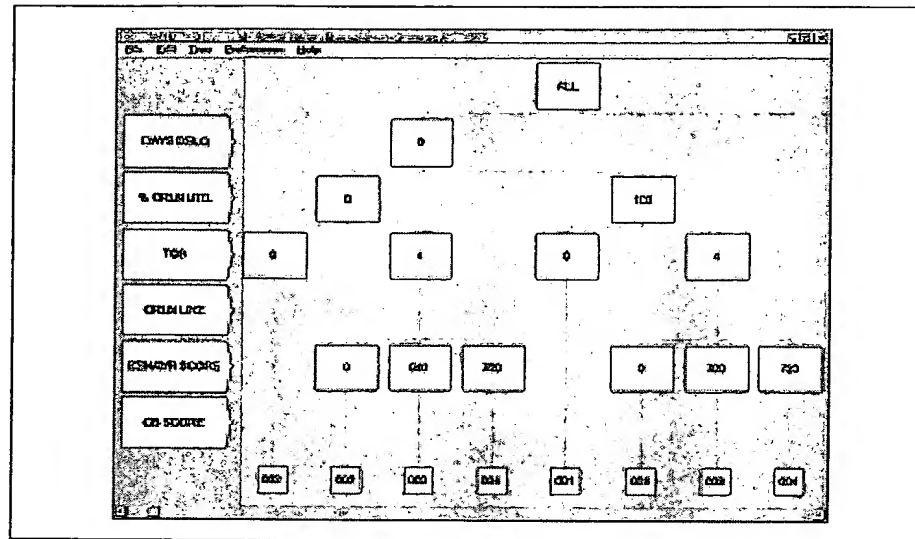


Figure 5: The Authorization Strategy tree.

## Sample Strategy Keys

The keys shown in figure 6 on page 201 are sometimes used in the Authorizations decision area. Keys are determined during the design meetings with your Fair, Isaac representative. Consequently, the keys described in this section may differ from those used in your installation. Consult the *TRIAD Project Guide* for a description of the keys used in your implementation of Authorizations.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among decision area strategies. The maximum number of keys in a strategy is fifteen. However, you need only select the keys needed for your strategy. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative.

Transaction Type	A general categorization of the transaction. Transaction Types are defined during the TRIAD design meetings. A maximum of 99 types will be mapped to 10 report types.
Days Delinquent	Number of days the account is delinquent.
Ever Paid	An indicator that shows if the account defaulted on the first payment.
Time-on-Books	Number of months an account has been open. This number is often one-relative; that is, one is added to the calculation so that the first month it is open, Time-on-Books equals one.
%Credit Line Used	Current balance expressed as a percent of the credit line. When the number is greater than 100%, the account is overlimit.
Credit Line	Account's current credit line.
Outstanding Balance	Current balance of the account. It may exclude disputed balances or include outstanding authorizations, if desired.
Behavior Score	An account's behavior score.
Credit Bureau Score	An account's credit bureau score.

Figure 6: Frequently used Authorization Strategy keys.

## Authorization Scenarios

The Authorizations scenarios define a series of tests to decide if a transaction will be accepted, declined, or referred. The Cushion and Percent Fit tests are described in the *Triggers* section, earlier in this chapter.

In addition to approving, declining, or referring a transaction, you can define supplemental actions. One user-defined action is provided for accepted transactions. Three user-defined actions are provided for declined or referred transactions. For example, you may need to send the account holder a letter explaining why a transaction was declined or set a block code when a transaction is attempted. These include a refer/decline code to show why an action should be taken for a non-accepted transaction. The Authorization Scenario table (see figure 7 on page 202) is delivered with a capacity for 999 scenarios. See your *TRIAD Project Guide* for the number selected for your installation.

Authorization Scenario

Environment Name: TEST

Scenario ID: 003 Scenario List Save

Description: Authorization scenario 003 - Test for \$200 over the line or 90% fit for normal, test for 250 over the line or 90% fit for holiday

Cashier Calculation Parameters

Normal Volume				Holiday (High) Volume			
Type	Value	% Fit		Type	Value	% Fit	
Credit	0	0000200	090	Credit	0	0000250	085
Cash	2	0000000	000	Cash	0	0000000	000

Action if Within Cushion: Approve Action

Action(s) if Over Cushion:

Ref/Decline Reason	Action 2	Action 3
R 0	DECL53	

---

Scenario ID: 004 Scenario List Save

Description: zero the line, block purchases

Cashier Calculation Parameters

Normal Volume				Holiday (High) Volume			
Type	Value	% Fit		Type	Value	% Fit	
Credit	0	0000000	000	Credit	0	0000000	000
Cash	0	0000000	000	Cash	2	0000000	000

Action if Within Cushion: Approve Action

Action(s) if Over Cushion:

Ref/Decline Reason	Action 2	Action 3
0 0	DECL59	

Record 1 of 1

Figure 7: The Authorization Scenario table.



## Authorizations Reporting

TRIAD software returns data to the Authorizations calling program about each transaction decision it makes. The calling program includes the TRIAD-generated data in the Authorization Log file. Periodically, a series of programs run in the batch environment using the Authorization Log file as input. The programs create two different types of reports: the Authorization Summary report and a series of Authorization Outcomes reports. An Authorization Report Record file is also created which serves as input to the Authorization Estimator program.

### Production Schedule

Cycle Tally reports are produced once a month, typically at month-end. If needed, they can also be produced on a weekly basis.

Reports are produced by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data.

- Authorization Summary report
- Authorization Outcomes by Digit Group and Behavior Score report
- Authorization Outcomes by Scenario and Behavior Score report

### The Authorization Summary Report

The Authorization Summary report (see figure 8, figure 9 on page 204, and figure 10 on page 204) presents information about accepted, referred, and declined authorizations by SPID, transaction type, and digit group. Reports are produced for TRIAD treatable transactions, non-TRIAD treatable transactions, and total transactions.

Unlike other reports generated by TRIAD, the Authorization Summary report is generated from a sweep of the Authorization Log file, which contains all transactions that have passed through the system.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 10		
REPORT ID : SAMS340A-01		REPORTING PERIOD - 04/01/1997 THRU 04/30/1997										RUN DATE : 05/09/1997		
AUTHORIZATION SUMMARY REPORT												RUN TIME : 18:16:36		
TRIAD TREATABLE TRANSACTIONS														
STRATEGIC PORTFOLIO ID: 02												NAME: GOLD		
TRANSACTION TYPE : ALL														
DIGIT	TOTAL	TOTAL	ACCEPT				REFER				DECLINE			
GROUP	TRANSACTIONS	AMOUNT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT
-----														
00-49	6	4,820	2	33.3	320	6.6	0	0.0	0	0.0	4	66.6	4,500	93.3
50-99	3	280	3	100.0	280	100.0	0	0.0	0	0.0	0	0.0	0	0.0
-----														
TOTAL	9	5,100	5	55.5	600	11.7	0	0.0	0	0.0	4	44.4	4,500	88.2

Figure 8: The Authorization Summary Report: TRIAD Treatable Transactions report.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 10				
REPORT ID : SAMS340A-01		REPORTING PERIOD - 04/01/1997 THRU 04/30/1997										RUN DATE : 05/09/1997				
AUTHORIZATION SUMMARY REPORT														RUN TIME : 18:16:36		
NON-TRIAD TREATABLE TRANSACTIONS																
STRATEGIC PORTFOLIO ID: 02 NAME: GOLD																
TRANSACTION TYPE : -- ALL --																
DIGIT	TOTAL	TOTAL	ACCEPT				REFER				DECLINE					
GROUP	TRANSACTIONS	AMOUNT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT		
-----																
00-49	7	3,985	7	100.0	3,985	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
50-99	6	2,590	2	33.3	1,000	38.6	0	0.0	0	0.0	4	66.6	1,590	61.3		
-----																
TOTAL	13	6,575	9	69.2	4,985	75.8	0	0.0	0	0.0	4	30.7	1,590	24.1		

Figure 9: The Authorization Summary Report: Non-TRIAD Treatable Transactions report.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 10		
REPORT ID : SAMS340A-01		REPORTING PERIOD - 04/01/1997 THRU 04/30/1997										RUN DATE : 05/09/1997		
AUTHORIZATION SUMMARY REPORT												RUN TIME : 18:16:36		
TRIAD AND NON-TRIAD TREATABLE TRANSACTIONS														
STRATEGIC PORTFOLIO ID: 02												NAME: GOLD		
TRANSACTION TYPE : ALL														
DIGIT	TOTAL	TOTAL	ACCEPT				REFER				DECLINE			
GROUP	TRANSACTIONS	AMOUNT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT
00-49	13	8,805	9	69.2	4,305	48.8	0	0.0	0	0.0	4	30.7	4,500	51.1
50-99	9	2,870	5	55.5	1,280	44.5	0	0.0	0	0.0	4	44.4	1,590	55.4
TOTAL	22	11,675	14	63.6	5,585	47.8	0	0.0	0	0.0	8	36.3	6,090	52.1

Figure 10: The Authorization Summary Report: TRIAD and Non-TRIAD Treatable Transactions report.

## Field Reference

The report headings for the Authorization Summary report show Reporting Period, Strategic Portfolio ID and Name, Transaction Type, and a description of the transactions as TRIAD treatable or non-TRIAD treatable.

TRIAD treatable transactions include transactions by accounts that are either:

- Delinquent
- Overlimit
- Neither delinquent or overlimit, but will exceed their limit with the transaction in question.
- Transactions classified as strategy ID 999 are reported in the Authorization Summary Report under the heading Refer, but they are not treated by TRIAD.

Non-TRIAD treatable transactions include transactions by the following type of accounts:

- Authorizations exclusions
- Accounts that are current and underlimit and would remain underlimit with the transaction in question.

Reporting period spans the period from the first cycle or daily record in the file until the last. Table 3 shows the fields in the report.

Table 3: Fields in Report: Authorization Summary.

Row heading:	
Digit Group	Digit group ranges.
Column headings:	
Total Transactions	The total number of transactions processed for authorization either by your system or by TRIAD.
Total Amount	Total amount of transactions expressed in thousands.
Accept	Number, amount, and corresponding percentages of accepted authorization transactions.
Number	Number of transactions in the range that were accepted.
Pct	Number of accepted transactions expressed as a percentage of the total transactions.
Amount	Amount of the accepted transactions in the range, expressed in hundreds.
Pct	Amount of the accepted transactions in the range, expressed as a percentage of the total amount.

Table 3: Fields in Report: Authorization Summary. (continued)

Refer	Number, amount, and corresponding percentages of referred authorization transactions.
Number	Number of transactions that were referred.
Pct	Number of referred transactions expressed as a percentage of the total transactions.
Amount	Amount of the referred transactions expressed in hundreds.
Pct	Amount of the referred transactions expressed as a percentage of the total amount.
Decline	Number, amount, and corresponding percentages of declined authorization transactions.
Number	Number of transactions that were declined.
Pct	Number of declined transactions expressed as a percentage of the total transactions.
Amount	Amount of the declined transactions expressed in hundreds.
Pct	Amount of the declined transactions expressed as a percentage of the total amount.

## The Authorization Outcomes Reports

The Authorization Outcomes by Digit Group and Behavior Score (see figure 11) and the Authorization Outcomes by Scenario and Behavior Score reports (see figure 12 on page 208) monitor the results of Authorization strategies. Both reports use the same column and row matrix. They differ in how the data is sorted. The first report examines the data in terms of digit group. The second examines data by scenario ID. Both reports use TRIAD-treatable transactions (excluding those accounts assigned to strategy ID 999). Strategy 999 transactions are not assigned a scenario so are not tallied in the Outcomes reports.

Each page of the report is a combination of SPID, digit group and transaction type or SPID, Scenario ID, and transaction type. In both reports, the rows contain behavior score ranges.

TRIAD DEMO SYSTEM.				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE								PAGE NO : 16			
REPORT ID : SAMS370A-01-V50				REPORTING PERIOD - 11/01/1997 THRU 11/30/1997								RUN DATE : 12/21/1997			
												RUN TIME : 14:56:44			
AUTHORIZATION OUTCOMES BY DIGIT GROUP AND BEHAVIOR SCORE															
TRIAD TREATABLE TRANSACTIONS															
STRATEGIC PORTFOLIO ID: 01 NAME: CLASSIC PORTFOLIO															
DIGIT GROUP : 00 - 99															
TRANSACTION TYPE : MERCH															
BEHAVIOR	TOTAL	TOTAL		ACCEPT		REFER		DECLINE							
SCORE	TRANSACTIONS	AMOUNT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT	NUMBER	PCT	AMOUNT	PCT	
001-099	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
100-225	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
226-230	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
231-235	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
236-240	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
241-245	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
246-260	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
261-399	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
400-575	6	1,380	2	33.3	350	25.3	4	66.6	1,030	74.6	0	0.0	0	0.0	
576-580	1	330	1	100.0	330	100.0	0	0.0	0	0.0	0	0.0	0	0.0	
581-585	1	350	0	0.0	0	0.0	1	100.0	350	100.0	0	0.0	0	0.0	
586-590	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
591-600	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
601-610	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
611-620	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
621-625	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
626-630	1	1,500	0	0.0	0	0.0	1	100.0	1,500	100.0	0	0.0	0	0.0	
631-635	1	2,000	0	0.0	0	0.0	1	100.0	2,000	100.0	0	0.0	0	0.0	
636-640	1	2,500	0	0.0	0	0.0	1	100.0	2,500	100.0	0	0.0	0	0.0	
641-645	1	2,600	0	0.0	0	0.0	1	100.0	2,600	100.0	0	0.0	0	0.0	
646-650	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
651-655	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
656-660	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
661-670	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
671-680	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
681-690	1	1,500	1	100.0	1,500	100.0	0	0.0	0	0.0	0	0.0	0	0.0	
691-695	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
696-700	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
701-710	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
711-720	1	6,500	0	0.0	0	0.0	1	100.0	6,500	100.0	0	0.0	0	0.0	
721-730	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
731-735	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
736-740	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
741-745	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
746-750	1	1,500	1	100.0	1,500	100.0	0	0.0	0	0.0	0	0.0	0	0.0	
751-755	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
756-760	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
761-765	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
766-770	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
771-999	14	4,950	0	0.0	0	0.0	7	50.0	2,020	40.8	7	50.0	2,930	59.1	
TOTAL	29	25,110	5	17.2	3,680	14.6	17	58.6	18,500	73.6	7	24.1	2,930	11.6	

Figure 11: The Authorization Outcomes by Digit Group and Behavior Score report.



## Field Reference

Report headings for the Authorization Outcomes by Digit Group and Behavior Score and the Authorization Outcomes by Scenario ID and Behavior Score reports each contain Reporting Period, Strategic Portfolio ID and Name, and Transaction Type. The Authorization Outcomes by Digit Group and Behavior Score report also contains Digit Group. The Authorization Outcomes by Scenario ID and Behavior Score report has Scenario ID in its heading in place of Digit Group. The report indicates that it is for TRIAD-treatable accounts.

TRIAD-treatable transactions include all transactions for accounts that pass primary trigger tests. Typically, these are accounts that are delinquent or overlimit and are not authorization exclusions. Accounts assigned to Strategy ID 999 are included in this report. Non-TRIAD treatable transactions include transactions for accounts that are authorization exclusions, or accounts that are current and not overlimit, and would remain underlimit with the transaction in question.

The reporting period spans the period from the first cycle or daily record in the file until the last. Table 4 shows the fields in these reports.

Table 4: Fields in Report: Authorization Outcomes by Digit Group and Behavior Score and Authorization Outcomes by Scenario ID and Behavior Score.

Row heading:	
Behavior Score	Behavior score ranges.
Column headings:	
Total Transactions	Total number of transactions in the Authorization Report Record file; that is, the number of transactions processed by TRIAD.
Total Amount	The total amount of the transactions in the Authorization Report Record file expressed in thousands.
Accept	The number, amount, and corresponding percentages of accepted authorization transactions in each range.
Number	The number of accepted transactions.
Pct	The percent of the total transactions that were accepted.
Amount	The amount of accepted transactions.
Pct	The total amount of accepted transactions as a percent of the total amount of all transactions in the score range.

Table 4: Fields in Report: Authorization Outcomes by Digit Group and Behavior Score and Authorization Outcomes by Scenario ID and Behavior Score. (continued)

Refer	The number, amount, and corresponding percentages of referred authorization transactions.
Number	The number of referred transactions.
Pct	The percent of the total transactions that were referred.
Amount	The amount of referred transactions.
Pct	The total amount of referred transactions as a percent of the total amount of all transactions.
Decline	The number, amount, and corresponding percentages of declined authorization transactions.
Number	The number of declined transactions.
Pct	The percent of the total transactions that were declined.
Amount	The amount of declined transactions.
Pct	The total amount of declined transactions as a percent of the total amount of all transactions.

## Authorizations Estimator Reports

For Authorizations strategies, the Estimator processes at the transaction level instead of the account level.

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row). The % of Row report can be quite useful in Authorizations, as the report shows the corresponding percentages of all transactions in each row of the tables that are accepted, referred, or declined.

A sample Authorizations Estimator Scenario - Total Amount report is shown in figure 13 on page 211, and a sample Authorizations Estimator Scenario - % of Row report is shown in figure 14 on page 212. All Authorizations Estimator reports use the same reporting matrix, which is shown in table 5 on page 213.



TRIAD DEMO SERVICES		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 17		
REPORT ID : SAMMARE-20-5.0C		AUTHORIZATIONS ESTIMATOR REPORT										RUN DATE : 04/15/1998		
PROCESSING DATE : 03/03/1998		SCENARIO TABLE - TOTAL AMOUNT REPORT										RUN TIME : 16:57:23		
STRATEGY-ID: 101														
TRAN TYPE: ALL TRANSACTIONS		SAMPLING RATE VARIES												
-----SCENARIO DEFINITIONS-----														
<-----REGULAR-----><-----HOLIDAY-----><-----ACTION----->														
<---CREDIT LINE---><---CASH LINE---><---CREDIT LINE---><---CASH LINE---><---APPROV <---REFER/DECLINE--->														
ID TYPE CUSHION FIT TYPE CUSHION FIT TYPE CUSHION FIT TYPE CUSHION FIT ACTION IND ACTION1 ACTION2 ACTION3														
-----														
<-----ACCEPT----->														
CUSHION PERCENT FIT REFER DECLINE TOTAL \$SCORED ODDS														
001	U	100	95	Z	0	0	U	105	90	Z	0	0	D	
					\$			12		0			44	56
					US\$			1,286		0			8,140	9,426
003	U	105	90	Z	0	0	U	110	85	Z	0	0	D	
					\$			28		2			20	50
					US\$			4,428		920			5,782	11,130
005	U	110	85	Z	0	0	U	120	80	Z	0	0	D	
					\$			46		5			11	62
					US\$			11,224		1,720			4,673	17,617
-----														
TOTAL FOR STRATEGY ID		\$	86	7	0	75	168	141						
		US\$	16,938	2,640	0	18,595	38,173	149.21						

**Figure 13: A sample Authorizations Estimator Scenario - Total Amount report.**

Figure 14: A sample Authorizations Estimator Scenario - % of Row report.

Table 5: Fields in Reports: Authorizations Estimator.

Row headings:	
Total	All transactions tallied in this group or total across all groups.
Column Headings:	
Accept	
Cushion	Tally of transactions accepted based on cushion calculation. Also, value of transactions (in specified currency) is shown.
Percent Fit	Tally of transactions accepted based on percent fit calculation. Also, value of transactions (in specified currency) is shown.
Refer	Tally of transactions referred based on default scenario action when the transaction is not accepted. Also, value of transactions (in specified currency) is shown.
Decline	Tally of transactions declined based on default scenario action when the transaction is not accepted. Also, value of transactions (in specified currency) is shown.
Total	Tally of all transactions and associated transaction value (in specified currency). Accept + Refer + Decline = Total
# Scored	Subset of the transactions associated with the transactions tallied above, the number that had a behavior score in the min to max range as specified in the Table Maintenance System. These are transactions usually associated with newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.
Odds	Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. 9,999 is a special case meaning there were no bad accounts. Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one. For more information on odds, see the chapter on <i>Behavior Scoring</i> in this manual.

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## 11: Reissue

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### About the Reissue Decision Area

In the Reissue decision area, TRIAD reviews an account to determine whether to reissue a card and for what length of time. Accounts can be reviewed multiple times before and after the card expiration date. By using multiple reviews, you can encourage cardholders to modify their behavior as a condition of reissuance. For example, before the reissue date, you can encourage customers with inactive accounts to re-activate. Or, you can tell customers whose cards are not reissued what they must do to re-establish the account.

Reissuance is normally scheduled as part of the monthly processing, but it can also be run on-demand. In either case, the processing methodology is the same. All non-excluded accounts are processed through a series of filters called triggers, for Reissue, based on expiration date. When a trigger activates a review, TRIAD searches the strategy table, retrieves the appropriate scenario, and returns the prescribed actions to the calling program for implementation.

This chapter examines the general setup for the Reissue decision area. Your installation may differ. See the *TRIAD Project Guide* for specific information about how this decision area is implemented at your installation. Table 1 shows the components of the Reissue decision area.

Table 1: Components of the Reissue decision area.

Configuring Options	Configure Reissue processing for your installation. Some configuring options are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Reissue decision area.
Trigger Events	Signal the time for an account to be reviewed.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Outcomes Reporting	Tallies and reports actions taken during the month.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

Table 2 shows the fields that allow you to configure Reissue processing for your installation.

Table 2: Configuring options in the Reissue decision area.

Field Name	Table	Description
Do Reissue Processing	System Control Fields	Signals TRIAD whether or not to do Reissue processing. For more information, see the <i>TRIAD Table Maintenance Guide</i> .
Reissue Report Ranges	Client Parameters/Report Ranges	Specifies five Reissue period ranges for Reissue Outcomes reports. The number entered is the lower-bound of the Months Reissued column ranges that appear in these reports.

## Exclusions

As in the other TRIAD decision areas, you can exclude categories of accounts from Reissue. The exclusion decisions are made in the design meetings with your Fair, Isaac representative. A few typical exclusion categories are:

- Special status accounts such as lost or stolen
- Bankrupt accounts
- Charged-off accounts

Exclusions in each decision area are for that area only. An account may be excluded from Reissue, but processed in other areas such as Delinquent Collections or Authorizations.

## Reissue Triggers

Reissue triggers are user-defined timing events based on Months to Expiration. You can configure the system to review accounts at up to six points before, during, and after the card expiration date. The triggers apply to a specific strategy ID. In figure 1, the triggers activate reviews six, four and two months before expiration, at expiration, and one and three months after expiration. The points before expiration are positive numbers and the points or months after expiration are negative numbers.

Months to expiration					
Reissue review points					
1.	2.	3.	4.	5.	6.
06	04	02	00	-01	-03

Figure 1: Reissue Review Points in the Reissue Parameters table.

## Reissue Review Points

TRIAD assigns a number between 1 and 6 (the Reissue Review Points) to the values entered in the Months to Expiration fields. For example, in figure 1, 6 months before expiration is assigned Reissue Review Point 1, 4 months before expiration is assigned Reissue Review Point 2, and so on. In the following example it is the Reissue Review Point number, not the months to expiration, that is used as the strategy key. Therefore, 6 months before expiration in figure 1 appears in the Reissue Strategy tree (figure 3) as a value of 1 under the Reissue Review Point key. Strategy keys are user-defined, so yours may be different, for example, Months to Expiration or Reissue Review Index instead of Reissue Review Point.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

## Table and Tree

- A Strategy ID links a set of strategy keys to its corresponding strategy table.
- Strategy table keys define parameters whose values cause an account to be assigned a particular scenario.
- Scenarios define treatments to be applied to the account.

Player Setup

Forwarded Host: 192.168.1.1

Send Message (Alt+M)

TreeView Play Forward

None Delete New

ID	NAME	POINT	SCORE	RPS	RPS ACTIVE	RPS ON BOARD	CO
0	Player001	100000	100000	100000	100000	100000	100000
1	Player001	100000	100000	100000	100000	100000	100000
2	Player001	100000	100000	100000	100000	100000	100000
3	Player001	100000	100000	100000	100000	100000	100000
4	Player001	100000	100000	100000	100000	100000	100000
5	Player001	100000	100000	100000	100000	100000	100000
6	Player001	100000	100000	100000	100000	100000	100000
7	Player001	100000	100000	100000	100000	100000	100000
8	Player001	100000	100000	100000	100000	100000	100000
9	Player001	100000	100000	100000	100000	100000	100000
10	Player001	100000	100000	100000	100000	100000	100000
11	Player001	100000	100000	100000	100000	100000	100000
12	Player001	100000	100000	100000	100000	100000	100000
13	Player001	100000	100000	100000	100000	100000	100000
14	Player001	100000	100000	100000	100000	100000	100000
15	Player001	100000	100000	100000	100000	100000	100000
16	Player001	100000	100000	100000	100000	100000	100000
17	Player001	100000	100000	100000	100000	100000	100000
18	Player001	100000	100000	100000	100000	100000	100000
19	Player001	100000	100000	100000	100000	100000	100000
20	Player001	100000	100000	100000	100000	100000	100000
21	Player001	100000	100000	100000	100000	100000	100000
22	Player001	100000	100000	100000	100000	100000	100000
23	Player001	100000	100000	100000	100000	100000	100000
24	Player001	100000	100000	100000	100000	100000	100000
25	Player001	100000	100000	100000	100000	100000	100000
26	Player001	100000	100000	100000	100000	100000	100000
27	Player001	100000	100000	100000	100000	100000	100000
28	Player001	100000	100000	100000	100000	100000	100000
29	Player001	100000	100000	100000	100000	100000	100000
30	Player001	100000	100000	100000	100000	100000	100000
31	Player001	100000	100000	100000	100000	100000	100000
32	Player001	100000	100000	100000	100000	100000	100000
33	Player001	100000	100000	100000	100000	100000	100000
34	Player001	100000	100000	100000	100000	100000	100000
35	Player001	100000	100000	100000	100000	100000	100000
36	Player001	100000	100000	100000	100000	100000	100000
37	Player001	100000	100000	100000	100000	100000	100000
38	Player001	100000	100000	100000	100000	100000	100000
39	Player001	100000	100000	100000	100000	100000	100000
40	Player001	100000	100000	100000	100000	100000	100000
41	Player001	100000	100000	100000	100000	100000	100000
42	Player001	100000	100000	100000	100000	100000	100000
43	Player001	100000	100000				

**Fair, Isaac Proprietary Information**



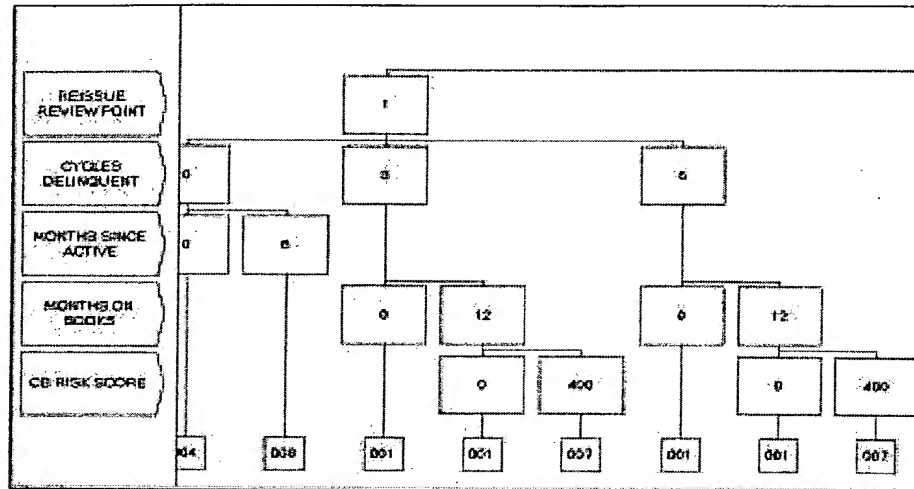


Figure 3: The Reissue Strategy tree.

## Sample Strategy Keys

The keys shown in table 3 are a sample of those often used in the Reissue treatment area. They may differ from those used in your installation. See the *TRIAD Project Guide* for a description of the keys used in your implementation of Reissue.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among strategies in a decision area. The maximum number of keys in a strategy is fifteen. However, you need only select the keys needed for your strategy. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative.

Table 3: Frequently Used Reissue Strategy Keys.

Reissue Review Point	<p>A number that corresponds to a Months to Expiration entry in the Reissue Parameters table.</p> <p>The first Months to Expiration entry in the Reissue Parameters table equates to a Reissue Review Point equal to 1. The second equals 2 and so on.</p> <p>This key is frequently used as the first reissue strategy key, allowing actions to correspond to the appropriate review points.</p>
Cycles Delinquent	Number of cycles delinquent.
Months Since Active	Number of months since the account had purchase or payment activity.
%Credit Line Used	<p>Current balance expressed as a percent of the credit line.</p> <p>When the number is greater than 100%, the account is overlimit.</p>

Table 3: Frequently Used Reissue Strategy Keys. (continued)

Months-On-Books	Number of months an account has been open. This number is often one-relative; that is, one is added to the calculation so that the first month it is open, Months-on-Books equals one.
Behavior Score	Account's behavior score.
Credit Bureau Score	Account's credit bureau score.

## Reissue Scenarios

You can define up to 999 scenarios in the Reissue Scenario table (see figure 4). This number may vary for your installation. See your *TRIAD Project Guide*. Each scenario either reissues for a specified number of months or it denies reissue with a reason code. The follow-up actions are user-defined. You can enter up to three follow-up actions.

The user-defined actions for reissue and non-reissue need not be identical. For example, a common user-defined action is a Fee Waiver Indicator for reissue actions and a Cancel Code for non-reissue actions.

The Reissue Scenario table below shows some examples of reissue actions. Notice that the non-reissue fields must be left blank if it is a reissue scenario and the reissue fields must be left blank if it is a non-reissue scenario.

The screenshot shows a window titled 'Reissue Scenario' with a table containing three scenarios. Each scenario has a 'Scenario ID' field, a 'Description' field, and two sub-tables: 'Reissue' and 'Non-Reissue'.

Scenario ID	Description	Reissue	Non-Reissue																
001	Deny Reissue - excessive delinquency	<table border="1"> <thead> <tr> <th>Months Released</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td>01</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Months Released	Letter ID	Statement Message	Min. Action	01				<table border="1"> <thead> <tr> <th>Reason ID</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td>001</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Reason ID	Letter ID	Statement Message	Min. Action	001			
Months Released	Letter ID	Statement Message	Min. Action																
01																			
Reason ID	Letter ID	Statement Message	Min. Action																
001																			
002	Reissue for 6 months	<table border="1"> <thead> <tr> <th>Months Released</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td>06</td> <td>ACT43</td> <td>ACT40</td> <td>ACT23</td> </tr> </tbody> </table>	Months Released	Letter ID	Statement Message	Min. Action	06	ACT43	ACT40	ACT23	<table border="1"> <thead> <tr> <th>Reason ID</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Reason ID	Letter ID	Statement Message	Min. Action				
Months Released	Letter ID	Statement Message	Min. Action																
06	ACT43	ACT40	ACT23																
Reason ID	Letter ID	Statement Message	Min. Action																
003	Reissue for 12 months	<table border="1"> <thead> <tr> <th>Months Released</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td>12</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Months Released	Letter ID	Statement Message	Min. Action	12				<table border="1"> <thead> <tr> <th>Reason ID</th> <th>Letter ID</th> <th>Statement Message</th> <th>Min. Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Reason ID	Letter ID	Statement Message	Min. Action				
Months Released	Letter ID	Statement Message	Min. Action																
12																			
Reason ID	Letter ID	Statement Message	Min. Action																

Figure 4: Two Reissue scenarios.

The scenario fields are shown in table 4 on page 222. See the *TRIAD Project Guide* for descriptions of how these fields have been implemented at your installation.

Table 4: Reissue Scenario fields.

ID	Identifies the Reissue scenario.
Description	Provides a place for a description of the scenario and information such as its implementation date.
Reissue	
Months Reissued	Provides the number of months in the reissue period.
Reissue Action 1-3	Identifies user-defined, optional reissue actions. Reissue and non-reissue actions may differ.
Non-Reissue	
Non-Reissue Reason	Identifies the reason for not reissuing.
Non-Reissue Action 1-3	Identifies user-defined, optional non-reissue actions. Reissue and non-reissue actions may differ.

## Reissue Outcomes Reporting

Each time an account is processed, whether eligible for review or not, a record is written to the Report Record file. At the end of the month, all the information is tallied and summarized for reporting. Collectively, the outcomes reports are known as the Cycle Tally Outcomes reports.

The Reissue Outcomes reports show the effects of the strategies on accounts in terms of cards reissued or not reissued, actions taken, and operational impact. Because the reports are summarized by digit group, you can easily compare Champion and Challenger strategies. There are three varieties of Reissue Cycle Tally reports:

- Reissue Outcomes Report by Digit Group and Scenario
- Reissue Outcomes Report by Digit Group and Behavior Score
- Reissue Outcomes Report by Digit Group and Review Month

## Production Schedule

Cycle Tally reports are produced once a month, typically at month-end. They are sorted by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data.

## Reissue Report Ranges

The numbers specified in the Reissue Report Ranges section of the Report Ranges table establish the column headings for the Reissue Outcomes reports. Reissue Range information is shown in the reports under the Months Reissued column headings.

## Outcomes By Digit Group and Scenario

The Reissue Outcomes Report by Digit Group and Scenario ID (see figure 5) summarizes the reissue and non-reissue actions taken by Scenario ID for each digit group and SPID. By comparing Champion and Challenger strategies, this report can help you determine the relative cost and benefits of each scenario.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 31			
REPORT ID : TRDC6REP-01-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/31/1997										RUN DATE : 09/01/97			
				REISSUE OUTCOMES BY DIGIT GROUP AND SCENARIO ID										RUN TIME : 18:12:36			
STRATEGIC PORTFOLIO ID: ALL																	
DIGIT GROUP: 00-99																	
SCEN ID	NUMBER ACCTS REVIEWED	% OF TOTAL REVIEWED	ACCTS NOT TIME ELIGIBLE	REISSUE ACTIONS								NON-REISSUE ACTIONS					
				MONTHS REISSUED					REISSUE	REISSUE	REISSUE	NUMBER	NONREIS	NONREIS	NONREIS		
				06-11	12-17	18-23	24-35	36-99	LABEL1	LABEL2	LABEL3	ACCTS	LABEL1	LABEL2	LABEL3		
000	0	0.0	3,220	0	0	0	0	0	0	0	0	0	0	0	0		
001	1,440	73.0	0	0	0	0	0	0	0	0	0	1,440	1,440	0	0		
012	60	3.0	0	0	0	0	0	0	0	0	0	60	60	0	0		
048	70	3.5	0	0	0	0	0	70	70	0	0	0	0	0	0		
055	190	9.6	0	0	0	0	0	0	0	0	0	190	190	190	190		
067	100	5.0	0	0	0	0	0	0	0	0	0	100	100	0	100		
088	30	1.5	0	0	0	0	0	0	0	0	0	30	30	0	30		
095	80	4.0	0	0	0	0	0	0	0	0	0	80	80	80	80		
TOTAL	1,970	100.0	3,220	0	0	0	0	70	70	0	0	1,900	1,900	270	400		

Figure 5: The Reissue Outcomes by Digit Group and Scenario ID report.

## Field Reference

The report headings for Reissue Outcomes by Digit Group and Scenario ID contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. Table 5 shows the fields in the report.

Table 5: Fields in Report: Reissue Outcomes by Digit Group and Scenario ID.

Scen ID	Identifies the Reissue Scenario.
Number Accts Reviewed	A tally of all reviewed accounts that were assigned this Scenario ID. Number Accounts Reviewed = Number of accounts treated in the Reissue decision area.
% of Total Reviewed	Percentage of reviewed accounts under each scenario. $\text{Number of Accounts Reviewed by Scenario ID} / \text{Total Number of Accounts Reviewed} \times 100 = \text{Percentage of Total Reviewed}$
Accts Not Time Eligible	A tally of the accounts that were not reviewed because they were not at a review point, as specified in the Months to Expiration fields of the Reissue Parameters table. Accounts Not Time Eligible = Number of accounts that were not reviewed. These accounts are tallied for Scenario 000.
Reissue Actions	Heading for reissue actions.
Months Reissued	The number of accounts reissued in each Reissue Report Range.
Reissue Labels 1-3	The number of accounts that received the indicated reissue action.
Non-Reissue Actions	Heading for non-reissue actions.
Number Accts	The number of accounts denied reissue.
Nonreis Labels 1-3	The number of accounts that received the indicated non-reissue action.
Total	Total for each column.

## Outcomes By Digit Group and Behavior Score

The Reissue Outcomes by Digit Group and Behavior Score report (see figure 6) summarizes the reissue and non-reissue actions by Behavior Score for each digit group and SPID. By comparing Champion and Challenger strategies this report can help you verify the role of risk in the reissue decision.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 25			
REPORT ID : TRDCREP-02-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/29/1997										RUN DATE : 08/01/1997			
				REISSUE OUTCOMES BY DIGIT GROUP AND BEHAVIOR SCORE										RUN TIME : 16:12:36			
STRATEGIC PORTFOLIO: 02 GOLD VISA																	
DIGIT GROUP: 00-09																	
NUMBER % OF ACCTS				-----REISSUE ACTIONS-----										-----NON-REISSUE ACTIONS-----			
ACCTS TOTAL NOT TIME				+----- MONTHS REISSUED -----+ REISSUE REISSUE REISSUE										NUMBER NONREIS NONREIS NONREIS			
SCORE REVIEWED ELIGIBLE				06-11 12-17 18-23 24-35 36-99 LABEL1 LABEL2 LABEL3										ACCTS LABEL1 LABEL2 LABEL3			
-----																	
000-099	80	21.0	130	0	0	0	0	0	0	0	0	0	80	80	0	10	
100-199	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
200-299	0	0.0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
300-399	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
400-449	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
450-499	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500-529	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
530-549	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
550-569	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
570-589	0	0.0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
590-609	0	0.0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
610-619	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
620-629	30	7.8	10	0	0	0	0	0	0	0	0	0	30	10	0	10	
630-639	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
640-649	20	5.2	10	0	0	0	0	0	0	0	0	0	20	20	0	0	
650-654	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
655-659	10	2.6	10	0	0	0	0	0	0	0	0	0	10	10	0	10	
660-664	0	0.0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	
665-669	20	5.2	0	0	0	0	0	0	0	0	0	0	20	20	0	10	
670-674	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
675-679	0	0.0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
680-684	10	2.6	0	0	0	0	0	0	0	0	0	0	10	10	0	10	
685-689	0	0.0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	
690-694	10	2.6	30	0	0	0	0	0	0	0	0	0	10	10	0	0	
695-699	20	5.2	0	0	0	0	0	0	0	0	0	0	20	20	0	0	
700-704	20	5.2	20	0	0	0	0	10	10	0	0	0	10	10	0	10	
705-709	10	2.6	0	0	0	0	0	0	0	0	0	0	10	10	10	10	
710-714	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
715-719	10	2.6	0	0	0	0	0	0	0	0	0	0	10	10	10	10	
720-724	10	2.6	20	0	0	0	0	10	10	0	0	0	0	0	0	0	
725-729	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
730-734	10	2.6	20	0	0	0	0	0	0	0	0	0	10	10	0	0	
735-739	10	2.6	50	0	0	0	0	0	0	0	0	0	10	10	0	0	
740-749	20	5.2	70	0	0	0	0	10	10	0	0	0	10	10	10	10	
750-759	30	7.8	30	0	0	0	0	0	0	0	0	0	30	30	20	30	
760-769	30	7.8	50	0	0	0	0	10	10	0	0	0	20	20	10	10	
770-779	30	7.8	60	0	0	0	0	20	20	0	0	0	10	10	0	0	
780-789	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
790-799	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800-999	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-----																	
TOTAL	380	100.0	590	0	0	0	0	60	60	0	0	0	320	320	60	130	

Figure 6: The Reissue Outcomes by Digit Group and Behavior Score report.

## Field Reference

The report headings for Reissue Outcomes by Digit Group and Behavior Score contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. Table 6 shows the fields in the report.

Table 6: Fields in Report: Reissue Outcomes by Digit Group and Behavior Score.

Behavior Score	Behavior score ranges for the rows are set in the Report Ranges table of the TRIAD Table Maintenance System.
Number Accts Reviewed	A tally of all accounts in this behavior score range that were reviewed. Number Accounts Reviewed = Number of accounts treated in the Reissue decision area.
% of Total Reviewed	Percentage of reviewed accounts in each behavior score range. $\text{Number of Accounts Reviewed in each behavior score range} / \text{Total Number of Accounts Reviewed} \times 100 = \text{Percentage of Total Reviewed}$
Accts Not Time Eligible	A tally of the accounts that were not reviewed because they were not at a review point, as specified in the Months to Expiration fields of the Reissue Parameters table. Accounts Not Time Eligible = Number of accounts that were not reviewed.
Reissue Actions	Heading for reissue actions.
Months Reissued	The number of accounts reissued in each Reissue Report Range.
Reissue Labels 1-3	The number of accounts that received the indicated reissue action.
Non-Reissue Actions	Heading for non-reissue actions.
Number Accts	The number of accounts denied reissue.
Nonreissue Labels 1-3	The number of accounts that received the indicated non-reissue action.
Total	Total for each column.



## Outcomes By Digit Group and Review Month

The Reissue Outcomes by Digit Group and Review Month report (see figure 7) summarizes the reissue and non-reissue actions by review month for each digit group and SPID. By comparing Champion and Challenger strategies, you can analyze the cost and effectiveness of actions at each stage of the reissue process.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE										PAGE NO : 19																			
REPORT ID : TRDC6REP-03-V5.0				REPORTING PERIOD - 07/01/1997 THRU 07/31/1997										RUN DATE : 09/01/1997																			
														RUN TIME : 10:36																			
REISSUE OUTCOMES BY DIGIT GROUP AND REVIEW MONTH																																	
STRATEGIC PORTFOLIO: 02 GOLD VISA																																	
DIGIT GROUP: 20-29																																	
				----- REISSUE ACTIONS -----														----- NON-REISSUE ACTIONS -----															
NUMBER		% OF		% OF		MONTHS REISSUED					REISSUE			REISSUE			REISSUE			NUMBER			NONREIS			NONREIS			NONREIS				
MTHS TO		ACCTS		ACCTS W/		ACCTS							REISSUE			REISSUE			REISSUE			ACCTS			LABEL1			LABEL2			LABEL		
EXPIRE		REVIEWED		ACTIONS		REISSUED							LABEL1			LABEL2			LABEL3						LABEL1			LABEL2			LABEL		
06/BEFORE		1		100.0		0.0		0		0		0		0		0		0		0		1		0		0		1					
04/BEFORE		1		100.0		0.0		0		0		0		0		0		0		0		1		0		1		0					
02/BEFORE		1		100.0		0.0		0		0		0		0		0		0		0		1		1		0		0					
00		6		100.0		50.0		1		1		0		1		0		1		1		3		1		1		1					
01/AFTER		1		100.0		100.0		1		0		0		0		1		0		0		0		0		0		0					
03/AFTER		1		100.0		100.0		0		1		0		0		0		1		0		0		0		0		0					
05/AFTER		1		100.0		100.0		0		0		0		1		0		0		1		0		0		0		0					
TOTAL		12		100.0		50.0		2		2		0		2		0		2		2		2		6		2		2					

Figure 7: The Reissue Outcomes by Review Month and Digit Group report.

## Field Reference

The report headings for Reissue Outcomes by Review Month and Digit Group contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle or daily record in the file until the last. Table 7 shows the fields in the report.

Table 7: Fields in Report: Reissue Outcomes by Digit Group and Review Month.

Mths to Expire	The number of months until or after expiration. This field may vary by Strategy ID.
Number Accts Reviewed	A tally by review month of all accounts in this digit group that were reviewed.
% of Accts with Actions	The percentage of reviewed accounts at the review month that received an action.
% of Accts Reissued	The percentage of reviewed accounts at the review month whose cards were reissued.
Reissue Actions	Heading for reissue actions.
Months Reissued	The number of accounts reissued at each point of Months to Expire.
Reissue Labels 1-3	The number of accounts receiving the indicated reissue action.

Table 7: Fields in Report: Reissue Outcomes by Digit Group and Review Month. (continued)

Non-Reissue Actions	Heading for non-reissue actions.
Number Accts	The number of accounts denied reissue.
Nonreissue Labels 1-3	The number of accounts receiving the indicated non-reissue action.
Total	Total for each column.

## Reissue Estimator Reports

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

All Reissue Estimator reports use the same reporting matrix, which is shown in table 8.

Table 8: Fields in Reports: Reissue Estimator.

<b>Row headings:</b>	
Evaluated	For Reissue, all accounts that are not ineligible and do not meet an exclusion criteria.
Not Time Elig	Accounts not evaluated because Months-to-Expiration does not match a Reissue Review point.
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Evaluated + Ineligible + Excluded + Stgy 999 (where shown) = Total.
<b>Column Headings:</b>	
Reissued	Tallies how many accounts were reissued.
Not Reissued	Tallies how many accounts were not reissued.
Total	Total number of accounts evaluated for a reissue decision.
# Scored	Subset of the accounts tallied above, the number that had a behavior score in the min to max range as specified in the Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.

Table 8: Fields in Reports: Reissue Estimator. (continued)

Odds	<p>Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. 9,999 is a special case meaning there were no bad accounts.</p> <p>Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one.</p> <p>For more information on odds, see the <i>Behavior Scoring</i> chapter in this manual.</p>
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# 12: Marketing Communications

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## About the Marketing Communications Decision Area

The Marketing Communications decision area allows you to increase your ability to cross-sell products, enhance customer relations, and retain customers. Marketing Communications evaluates risk to better judge which accounts will bring the best returns on each campaign.

The Marketing Communications decision area can be a regularly scheduled part of your normal cycle processing or it can be run on-demand. In either case, the processing methodology is the same. All non-excluded accounts are processed through a series of filters called triggers. For an account to be assigned a Marketing Communications scenario, it must first satisfy all of the trigger criteria. If it does, the software searches the strategy table, retrieves the scenario, and returns the actions to the calling program for implementation.

This chapter examines the general components of the Marketing Communications decision area. Your installation may differ. Please see your *TRIAD Project Guide* for specific information about the implementation of Marketing Communications at your installation. Table 1 shows the components of the Marketing Communications decision area.

Table 1: Components of the Marketing Communications decision area.

Configuring Options	Configure Marketing Communications processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Marketing Communications decision area.
Trigger Events	Signal the time or circumstances for a Marketing Communications review.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Outcomes Reporting	Tallies and reports actions taken during the month.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

These field values are determined during the TRIAD design meetings. They should not be altered without consulting your Fair, Isaac representative.

## Exclusions

You can exclude categories of accounts from the Marketing Communications decision area. Exclusion decisions are made in the design meetings with your Fair, Isaac representative. For example, you may choose to exclude bankrupt accounts or accounts whose cardholder or borrower is deceased. Exclusions in the Marketing Communications decision area are for that decision area only. An account might be excluded from Marketing Communications, but processed in other decision areas, such as Delinquent Collections and Authorizations.

## Marketing Communications Triggers

Triggers play a major role in the Marketing Communications decision area. They act as filters that pre-screen accounts before the strategy table search. Triggers are tied to a Strategy ID. Immediately after selecting a set of Marketing Communications strategy keys, TRIAD prompts you for the corresponding set of triggers. You can copy values from an existing trigger set or you can provide a new set of values.

Figure 1 on page 233 shows the Marketing Communications Parameters table, which contains the trigger fields.

Name	Type	Lowest Value	Highest Value
1. Cycle Delinquent	R	000000	000009
2. Returned Mail Indicator	O	000000	000001
3. Zero Balance	O	000000	000001
4. Phone Indicator	R	000000	000005
5. Merchandise Indicator	R	000000	000009
6. Organization	O	000000	000009
7. User Defined Trigger 1	R	000000	000009
8. User Defined Trigger 2	O	000000	000000
9. User Defined Trigger 3	O	000000	000000

Figure 1: The Marketing Communications Parameters table.

## Trigger Parameters and Sample Triggers

Each trigger (see table 2) has three parameters associated with it: Type (Required/Optional, Not Used), Lowest Value, and Highest Value. An account must pass all Required tests and, if optional triggers are specified, one Optional test to qualify for review in the strategy table.

You set a trigger by providing a value for each of the Low and High Value parameters. If you do not wish to use a particular trigger, set the Type switch to Not Used.

Table 2: Trigger parameters.

Type	Designates whether the trigger is Required, Optional, or Not Used. Required and Optional are translated into "and" and "or" conditions, respectively. All Required parameter conditions must be met for an account to qualify for a strategy table search. Additionally, only one Optional parameter must be met for an account to qualify for a strategy table search. Not Used triggers are ignored.
Lowest Value	Sets the bottom of the range of acceptable values for this trigger. This value is inclusive.
Highest Value	Sets the top of the range of acceptable values for this trigger. This value is inclusive.

Many types of fields can be used as triggers, including some that are used as keys. Table 3 contains a few examples. See your *TRIAD Project Guide* for a listing of the triggers used in your installation.

Table 3: Sample Communication triggers.

Months Since Last Solicitation	Establishes an amount of time that must pass between solicitations.
Loan Type Code	Identifies the type of loan; for example a new car loan or a used car loan. This trigger field is often used as a key to segregate treatment by loan type.
Original Note Amount	Amount of the original loan. Permits cross-selling by amount brackets.
Months Until Payoff	Identifies a range of months until a loan is fully repaid. This can be useful in a solicitation that focuses on customers about to finish paying a loan.
Months Since Payoff	Identifies a range of months since a loan was fully repaid. This can be useful in soliciting new loans from customers who have proven their ability to repay in full.
Bank Number	Identifies a particular lender in a multi-lender environment.
Number of Payments Paid	Targets customers for a special solicitation; for example, refinance at a particular stage of paying back a loan.
Credit Limit	Identifies credit line.
Months Since Expiration	Identifies the number of months in relation to their expiration date.
Last Solicitation Code	Identifies the last solicitation sent.

## Trigger and Strategy Key Interaction

A trigger field is often replicated as a key. For example, Phone Indicator may be a required trigger, letting you filter out all but specific types such as those who have a telephone. For purposes of the filtering process, two types of phone indicators may be targeted for this telemarketing campaign. But in the strategy, each indicator may have its own branch, terminating in different actions. In the examples in this chapter, Phone Indicator Codes 4 and 5 are targeted in the trigger field. In the strategy, they are treated differently at the Phone Indicator level, each having its own strategy tree branch, as seen in figure 2 on page 235 and figure 3 on page 236.



## Marketing Communications Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. You build strategy trees in the TRIAD Table Maintenance System.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

### Table and Tree

A Marketing Communications Strategy table has three parts: Strategy ID, key fields, and scenarios. Each has a particular function.

- A Strategy ID links a set of strategy keys to its corresponding strategy table.
- Strategy table keys define conditions under which an account is assigned to a particular scenario.
- Scenarios define treatments applied to the account.

Whether you view your Marketing Communications strategy as a table (see figure 2 on page 235) or tree (see figure 3 on page 236), you can see a one-to-one correspondence between each table row and each tree branch. Both rows and branches consist of key values and a resulting action.

SCEN ID	TRIALID	CYCLES	PRODUCT CODE	RECEIPT LINE UTIL	PHONE TRF	ZETA/2 SCORE	CS SCORE
001	000000	000000	000000	000000	000000	000000	000000
001	000000	000000	000000	000000	000000	000000	000000
002	000000	000000	000000	000000	000000	000000	000000
003	000000	000000	000000	000000	000000	000000	000000
002	000000	000000	000000	000000	000000	000000	000000
004	000000	000000	000000	000000	000000	000000	000000
005	000000	000000	000000	000000	000000	000000	000000
006	000000	000000	000000	000000	000000	000000	000000
007	000000	000000	000000	000000	000000	000000	000000
008	000000	000000	000000	000000	000000	000000	000000
009	000000	000000	000000	000000	000000	000000	000000
010	000000	000000	000000	000000	000000	000000	000000
011	000000	000000	000000	000000	000000	000000	000000
012	000000	000000	000000	000000	000000	000000	000000
013	000000	000000	000000	000000	000000	000000	000000
014	000000	000000	000000	000000	000000	000000	000000
015	000000	000000	000000	000000	000000	000000	000000
016	000000	000000	000000	000000	000000	000000	000000

Figure 2: The Marketing Communications Strategy table.

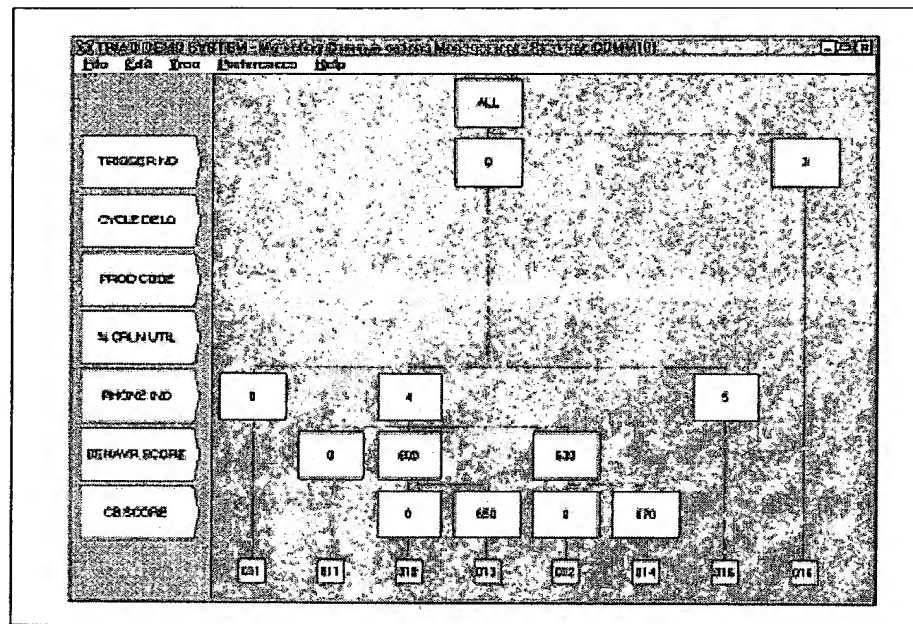


Figure 3: The Marketing Communications Strategy tree.

## Strategy Keys

The keys described in this section (see table 4) are used in the Marketing Communications decision area. Keys are determined during the design meetings with your Fair, Isaac representative. Consequently, the keys described in this section may differ from those used in your installation. Consult the *TRIAD Project Guide* for a description of the keys used in your implementation of Marketing Communications.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among strategies in a decision area. The maximum number of keys in a strategy is fifteen. However, you need select only keys for your strategy. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative.

Table 4: Frequently Used Marketing Communications Strategy Keys.

Trigger Event	Identifies the first affirmative optional trigger test. If no optional triggers are used, this value will equal zero. For example, if you have three Required and four Optional triggers, this field will contain the number of the first Optional trigger with an affirmative test.
Cycles Delinquent	Delinquency level.
Customer Relationship Code	Identifies the types of relationships (credit cards, line-of-credit, loans) the customer has with the institution.
Percent of Loan Paid	Percent of the original principal that has been paid back in a closed-end loan.
Months Since Active	Number of months since account was active.
Loan Type Code	Identifies the type of loan; for example a used car loan or a new car loan. This field is often used as a trigger and as a strategy key.
Homeowner	Identifies home owners and renters.
Behavior Score	Account's behavior score.
Credit Bureau Score	Account's credit bureau score.
Phone Number Indicator	Identifies accounts with valid phone numbers.

## Marketing Communications Scenarios

All ten Marketing Communications actions are completely user-defined. This section of the chapter examines some general Marketing Communications actions. See your *TRIAD Project Guide* for the actions used at your installation. In general, Marketing Communications actions can be divided into the following categories:

- Print a statement message
- Include a statement insert
- Send a letter
- Queue for a telemarketing campaign
- Take no action at all (all action fields set to blanks)

All Marketing Communications strategies use scenarios from the Marketing Communications Scenario table (see figure 4). The Scenario ID is the link between the strategy and scenario tables. The Marketing Communications Scenario table is delivered with a capacity for 999 scenarios. See your *TRIAD Project Guide* for the number selected for your installation.

The screenshot displays a software window titled "Marketing Communications Scenario Table". It contains two main sections, each representing a scenario entry. Each entry includes a "Scenario ID" field, a "Description" field, and a "Preferred Values" section with ten action fields (Action 1 through Action 10).

**Scenario 1:**

- Scenario ID: 001
- Description: Marketing Scenario 001
- Preferred Values:
 

Action 1: 0011	Action 2: 0000	Action 3: 0000	Action 4: 0000	Action 5: 0000
Action 6: 0000	Action 7: 0000	Action 8: 0000	Action 9: 0000	Action 10: 0000

**Scenario 2:**

- Scenario ID: 002
- Description: Marketing Scenario 002
- Preferred Values:
 

Action 1: 0011	Action 2: 0000	Action 3: 0000	Action 4: 0000	Action 5: 0000
Action 6: 0000	Action 7: 0000	Action 8: 0000	Action 9: 0000	Action 10: 0000

Figure 4: The Marketing Communications Scenario table.

## Marketing Communications Outcomes Reporting

Each time a Marketing Communications action is taken, a record is written to the Report Record file. At the end of the reporting period, all the information is tallied and summarized. Collectively, the Outcomes reports are known as the Cycle Tally reports.

The Marketing Communications Outcomes reports show the number of accounts assigned to each action. Because the reports are summarized by digit group, you can easily compare Champion and Challenger strategies. There are four Marketing Communications Cycle Tally reports:

- Trigger Outcomes
- Outcomes by Digit Group
- Outcomes by Digit Group and Behavior Score
- Outcomes by Digit Group and Scenario

### Production Schedule

Cycle Tally reports are produced once a month, typically at month-end. If needed, they can also be produced on a daily or weekly basis. Under normal conditions, monthly reports are sufficient.

Reports are produced by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data.

### Trigger Outcomes Report

The Marketing Communications Trigger Outcomes report (see figure 5 on page 240) provides a list of all the accounts, segmented into digit groups, that passed into the Marketing Communications strategies. It lists the triggers, trigger values, and how many accounts met each trigger's criteria. The columns and rows are defined in the table shown in figure 5 on page 240.

TRIAD DEMO SYSTEM					TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE					PAGE NO : 9		
REPORT ID : TRD-6MCP-01-V5.0					REPORTING PERIOD - 02/01/1997 THRU 02/28/1997					RUN DATE : 03/07/1997		
PROCESSING DATE : 03/07/1997										RUN TIME : 17:29:45		
MARKETING COMMUNICATIONS TRIGGER OUTCOMES												
STRATEGIC PORTFOLIO ID: 12										NAME: Acquisition		
DIGIT GROUP	TOTAL ACCOUNTS	NUMBER EXCLUDED	FAILED TRIGGERS	PASSED TRIGGERS	STORY ID	TRIGGER DATA				NUMBER FAILED	NUMBER PASSED	
						LABELS	TYPE	FROM	TO			
00-49	0	0	0	0	801	01 ANNUAL FEE	O	0	24		0	
	29	0	0	29		02 CYCLES DELQ	O	1	9		0	
						03 MTS SMC DEB TRN	O	1	24		0	
						04 CURRENT BALNCE	O	0	4		0	
						05 MTS SMC LST RPR	O	0	999		0	
						06 USER DEFINED	O	0	999		0	
						07 USER DEFINED	O	0	9999999		20	
						08 USER DEFINED	O	0	9999999		9	
						09 USER DEFINED	O	0	999		0	
						10 USER DEFINED	O	0	9999999		0	
						FAILED ALL OPTIONAL TRIGGERS				0		
50-99	0	0	0	0	802	01 ANNUAL FEE	R	0	24	31		
	31	0	31	0		02 CYCLES DELQ	R	1	9	0		
						03 MTS SMC DEB TRN	R	1	24	0		
						04 CURRENT BLNCE	R	0	4	0		
						05 MTS SMC LST RPR	R	0	999	0		
						06 USER DEFINED	R	0	999	0		
						07 USER DEFINED	R	0	9999999	0		
						08 USER DEFINED	R	0	9999999	0		
						09 USER DEFINED	R	0	999	0		
						10 USER DEFINED	R	0	9999999	0		
						PASSED ALL REQUIRED TRIGGERS				0		

Figure 5: The Marketing Communications Trigger Outcomes report.

## Field Reference

The report headings for Marketing Communications Trigger Outcomes contain the Reporting Period and the Strategic Portfolio ID and Name. The reporting period spans the period from the first cycle or daily record in the file until the last. The fields in the report are shown in table 5.

Table 5: Fields in Report: Marketing Communications Trigger Outcomes.

<b>Row headings:</b>	
Digit Group	Random digit group range.
Possible Outcomes:	Failed all optional triggers, Passed all required triggers, No triggers used, All Passed
Total	Total accounts tallied.
<b>Column headings:</b>	
Total Accounts	Total number of accounts reviewed in the digit group.
Number Excluded	Number of accounts excluded from the decision area for the indicated digit group.
Failed Triggers	Number of accounts that did not meet any of the trigger criteria for the indicated digit group.
Passed Triggers	Number of accounts that met the trigger criteria for the indicated digit group.
Strategy ID	Strategy Identification number.
Trigger Data	
Labels	Trigger number and name.
Type	Type of trigger: Optional, Required, or Not Used.
From	Lower-bound value of the trigger range. The value is inclusive.
To	Upper-bound value of the trigger range. The value is inclusive.
Number Failed	Number of accounts that failed the Required trigger criteria.
Number Passed	Number of accounts that passed the Optional trigger criteria.

## Outcomes by Digit Group

The Marketing Communications Outcomes by Digit Group report (see figure 6) tracks the actions taken in each digit group. The actions are tracked by digit group, making it easy to compare Champion and Challenger strategies.

TRIAD DEMO SYSTEM			TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE							PAGE NO : 1		
REPORT ID : TRDCMCP-02-v5.0A			REPORTING PERIOD - 07/01/1997 THRU 07/29/1997							RUN DATE : 08/02/1997		
PROCESSING DATE : 08/02/1997										RUN TIME : 15:46:12		
MARKETING COMMUNICATIONS OUTCOMES BY DIGIT GROUP												
STRATEGIC PORTFOLIO ID: 01			NAME: DIRECT INSTALLMENT LOANS									
			----- ACTION(S) RECEIVED -----									
			NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
			RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING	RECEIVING
DIGIT	TOTAL											
GROUP	REVIEWED	ACTION 1	ACTION 2	ACTION 3	ACTION 4	ACTION 5	ACTION 6	ACTION 7	ACTION 8	ACTION 9	ACTION 10	
-----												
00-19	84	30	0	27	27	57	0	0	0	0	0	0
20-39	100	42	69	36	12	88	0	0	0	0	0	0
40-59	100	56	62	19	0	68	0	0	0	0	0	0
60-79	100	47	43	10	17	57	0	0	0	0	0	0
80-99	89	89	0	0	0	89	0	0	0	0	0	0
-----												
TOTAL	473	274	174	92	56	359	0	0	0	0	0	0

Figure 6: The Marketing Communications Outcomes by Digit Group report.

## Field Reference

The headings for the Marketing Communications Outcomes by Digit Group report contain the Reporting Period and the Strategic Portfolio ID and Name. The reporting period spans the period from the first cycle or daily record in the file until the last. The report fields are shown in table 6.

Table 6: Fields in Report: Marketing Communications Outcomes by Digit Group.

Row headings:	
Digit Group	Random digit group ranges.
Total	Total receiving each action.
Column headings:	
Total Reviewed	Total number of accounts reviewed in each digit group. These are accounts that were not excluded and passed the trigger tests.
Action(s) Received Action 1 through Action 10	Number of accounts in each digit group that received the indicated scenario action. All actions in a scenario are tallied. See your <i>TRIAD Project Guide</i> for the Action labels that apply to your installation.





## Field Reference

The headings for Marketing Communications Outcomes by Digit Group and Behavior Score report contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle or daily record in the file until the last. The fields are shown in table 7.

Table 7: Fields in Report: Marketing Communications Outcomes by Digit Group and Behavior Score.

Row headings:	
Behavior Score	Behavior score ranges from Report Ranges table in TRIAD Table Maintenance System.
Total	Total of accounts receiving each action.
Column headings:	
Total Reviewed	Total number of accounts in each behavior score range that were reviewed.
Action(s) Received Action 1 through Action 10	Number of accounts in each behavior score range that received the indicated scenario action. All actions in a scenario are tallied. See your <i>TRIAD Project Guide</i> for the Action labels that apply to your installation

## Outcomes by Digit Group and Scenario ID

The Marketing Communications Outcomes by Digit Group and Scenario ID report (see figure 8) tracks the actions taken in each scenario. The actions are reported by digit group, making it easy to compare Champion and Challenger strategies.

TRIAD demo SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 1					
REPORT ID : TRDCMCP-04-V5.0A		REPORTING PERIOD - 07/01/1997 THRU 07/29/1997				RUN DATE : 08/02/1997					
PROCESSING DATE : 08/02/1997						RUN TIME : 15:46:12					
MARKETING COMMUNICATIONS OUTCOMES BY DIGIT GROUP AND SCENARIO ID											
STRATEGIC PORTFOLIO ID: 01				NAME: DIRECT INSTALLMENT LOANS							
DIGIT GROUP		: 00-19									
----- ACTION DESCRIPTIONS FROM SCENARIO -----											
SC ID	LETTER ID	STMT MESSAGE	STMT INSERT	TELEMT QUEUE	ACTION 5	ACTION 6	ACTION 7	ACTION 8	ACTION 9	ACTION 10	TOTAL REVIEWED
-----											
001											2,344
002	A1										1,846
003	A2										1,568
004	A3										1,205
005	A4										957
006	A5										858
007				R01							498
008				R02							474
-----											
TOTAL	0	0	0	84	0	0	0	0	0	0	9,750

Figure 8: The Marketing Communications Outcomes by Digit Group and Scenario ID report.

## Field Reference

The report headings for the Marketing Communications Outcomes by Digit Group and Scenario ID contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle or daily record in the file until the last.

The fields in the report are shown in table 8. Please note that all scenario actions are user-defined. The actions used at your installation may differ from those on the sample report.

Table 8: Fields in Report: Marketing Comm Outcomes by Digit Group and Scenario ID.

<b>Row headings:</b>	
Scenario ID	Identifies the Marketing Communications scenario.
Total	Total of accounts receiving each action.
<b>Column headings:</b>	
Action Descriptions from Scenario:	
Letter ID	Identifier for letters sent.
Statement Message	Identifier for statement messages printed.
Statement Insert	Identifier for statement inserts sent.
Telemarket Queue	Identifier for accounts queued for phone solicitation.
Action 5 - 10	Identifier for accounts that received the indicated scenario action.
Total Reviewed	Number of accounts receiving each action which was specified for that scenario.

## Marketing Communications Estimator Reports

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

All Marketing Communications Estimator reports use the same reporting matrix, which is shown in table 9.

Table 9: Fields in Reports: Marketing Communications Estimator.

Row headings:	
Total Pass Trig	All accounts that passed all required triggers and at least one optional trigger.
Total Fail Trig	All accounts that failed at least one required trigger.
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Evaluated + Excluded + Stgy 999 (where shown) = Total
Column Headings:	
Trigger Label	This label is specified in the <i>TRIAD Project Guide</i> .
Trigger #	The number of the trigger associated with the label, also specified in the <i>TRIAD Project Guide</i> .
Pass	
# Accts	Number of accounts that pass each optional trigger.
Fail/Total	
# Accts	Number of accounts that fail a required trigger.
# Scored	Subset of the accounts tallied above, the number that had a behavior score in the min to max range as specified in the Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.
Odds	Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one. For more information on odds, see the chapter on <i>Behavior Scoring</i> in this manual.

# 13: Performance-based Pricing

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## About the Performance-based Pricing Decision Area

The Performance-based Pricing decision area, also known as Repricing, allows you to adjust an account's pricing structure based on the account's performance. Using strategic filtering and grouping of accounts, it facilitates the adjustment of values such as APR, annual fee, and other fees based on the account's history. The Performance-based Pricing decision area allows flexibility within the areas of strategy keys, triggers, and scenarios, providing for greater profitability.

The Performance-based Pricing decision area can be a part of your normal cycle processing or it can be run on demand. In either case, the processing methods are the same.

- All non-excluded accounts are processed through a series of filters called triggers.
- For an account to be assigned a Performance-based Pricing strategy, it must first satisfy the trigger criteria.
- If it does, the software takes these actions:
  - Searches the strategy table
  - Retrieves the scenario
  - Returns the actions to the calling program for implementation

This chapter examines the general components of the Performance-based Pricing decision area. Your installation may differ. Please see your *TRIAD Project Guide* for specific information about the implementation of Performance-based Pricing at your installation.

The components of the Performance-based Pricing decision area are shown in table 1.

Table 1: Components of the Performance-based Pricing decision area.

Configuring Options	Configure Performance-based Pricing processing for your installation. Some configuring options which are not discussed in this chapter are set at project initiation. See your <i>TRIAD Project Guide</i> for the settings selected for your installation.
Exclusions	Identify account categories that are not processed in the Performance-based Pricing decision area.
Trigger Events	Signal the time or circumstances for a Performance-based Pricing review.
Strategies	Evaluate accounts and assign the appropriate scenario.
Scenarios	Specify actions to be taken on an account.
Outcomes Reporting	Tallies and reports the actions taken during the month.
Estimator Reporting	Provides a count of the scored accounts and associated odds for each row of the control tables.

## Configuring Options

These field values are determined during the TRIAD design meetings. They should not be altered without consulting your Fair, Isaac representative.

## Exclusions

You can exclude categories of accounts from the Performance-based Pricing decision area. Exclusion decisions are made in design meetings with your Fair, Isaac representative. For example, you may choose to exclude bankrupt accounts or accounts whose cardholder or borrower is deceased. Exclusions in the Performance-based Pricing decision area are for that decision area only. An account might be excluded from Performance-based Pricing but processed in other decision areas, such as Delinquent Collections or Authorizations.

## Performance-based Pricing Triggers

Triggers play a major role in the Performance-based Pricing decision area. They act as filters, screening accounts before the strategy table search. Triggers are tied to a Strategy ID. You can copy values from an existing trigger set or you can define a new set of values.

In the TRIAD Table Maintenance System, you can edit a set of triggers in the Performance-based Pricing Parameters table. You can access this table in one of two ways:

- Click Parameters in the Performance-based Pricing Menu table
- Click Parameters in the Performance-based Pricing Strategy table

## Trigger Parameters and Sample Triggers

Each trigger has three parameters associated with it: Type (Required/Optional/Not Used), Lowest Value, and Highest Value. An account must pass all Required tests and, if optional triggers are specified, one Optional test to qualify for review in the strategy table.

You set a trigger by providing a value for each of the parameters (see table 2 on page 250). If you do not wish to use a particular trigger, set the Type switch to Not Used. Up to fifteen triggers can be tailored for your installation (see figure 1).

Name	Type	Lowest Value	Highest Value
1. Cycle Delinquent	R	0000000	0000009
2. Returned Mail Indicator	R	0000000	0000001
3. Zero Balance	O	0000000	0000001
4. Phone Indicator	R	0000000	0000001
5. Merchandise Indicator	R	0000000	0000009
6. Organization	O	0000000	0000009
7. User Defined Trigger 1	R	0000000	9999999
8. User Defined Trigger 2	O	0000000	0000000
9. User Defined Trigger 3	O	0000000	0000000
10. User Defined Trigger 4	R	0000000	0007777

Figure 1: The Performance-based Pricing Parameters table.

Table 2: Trigger parameters.

Name	Labels the trigger with a number and name.
Type	Designates whether the trigger is Required, Optional, or Not Used. Required triggers function as logical "and" conditions. All Required parameter conditions must be met for an account to qualify for a strategy table search. Optional triggers function as logical "or" conditions. Additionally, one Optional parameter must be met for an account to qualify for a strategy table search. Not Used triggers are ignored.
Lowest Value	Defines the bottom of the range of acceptable values for this trigger. This value is inclusive. Trigger values are numeric.
Highest Value	Defines the top of the range of acceptable numeric values for this trigger. This value is inclusive. Trigger values are numeric.

Many types of fields can be used as triggers, including some that are used as keys. Table 3 shows a few examples. See the *TRIAD Project Guide* for a listing of the triggers used in your installation.

Table 3: Sample Performance-based Pricing triggers.

Months Since Last Performance-based Pricing	Identifies the amount of time that has passed since the account was last repriced.
Cycles Delinquent	Classifies an account's delinquency level.
Current Balance	Identifies the amount currently owed on the account including purchases, cash advances, and all finance charges.
Months Since Last Debit	Identifies the number of months since the debit against the account.
Account Type	Identifies the type of relationship, for example, credit card or line-of-credit, the customer has with the institution.
Transactor/Revolver	Establishes whether the account is consistently paid in full or a balance is left each month.
Credit Limit	Identifies the credit line.
Months Until Expiration	Identifies the number of months until the credit card expires.



## Trigger and Strategy Key Interaction

A trigger field is often replicated as a key. For example, Cycles Delinquent may be a required trigger, letting you filter out all individuals except those who are less than three cycles delinquent. Then in the strategy, each delinquency level has its own branch, possibly resulting in different actions.

## Performance-based Pricing Strategies

A strategy defines the profile of an account upon which a specific set of actions are taken. The first step in building a strategy is to determine the optimal set of decision keys. The second step is to build a strategy tree using the assigned keys. You can build strategy trees using the TRIAD Table Maintenance System.

For further information on selecting strategy keys and building a strategy tree, see the *TRIAD Table Maintenance Guide*. For a better understanding of the concepts of strategy development, see the chapter *Strategy Development*.

## Table and Tree

A Performance-based Pricing Strategy table has three parts: Strategy ID, the key fields, and scenarios.

- A Strategy ID links a set of strategy keys and triggers to its corresponding strategy table.
- Strategy table keys define conditions under which an account is assigned to a particular scenario.
- Scenarios define treatments applied to the account.

You can view your Performance-based Pricing strategy as a table (figure 2 on page 252) or tree (figure 3 on page 252). Each table row corresponds to a branch in the strategy tree. Both rows and branches consist of key values and a resulting action as shown in the following figures.

Environment Name: TEST

Strategy: ☐ AS ☒ Demo Pricing Strategy

TreeView New Dictionary  
Notes Details Data

SCEN ID	TRIGGER NUMBER	TIME OUT SECONDS	REPRIC PENDING STATUS	BALANCE	EAL/ AVE BAL LAST 6	SCHAVR SCORE	REVENUE SCORE	ATTR SCORE
001	1	000000	000000	000000	000000	000000	000000	000000
001	1	000005	000000	000000	000000	000000	000000	000000
001	1	000005	000012	000000	000000	000000	000000	000000
001	1	000005	000012	000000	000000	000000	000000	000000
001	1	000005	000012	000000	000000	000000	000000	000000
011	1	000005	000012	000000	000000	000000	000000	000000
012	1	000005	000012	000000	000000	000000	000000	000000
018	1	000005	000012	000000	000000	000000	000000	000000
011	1	000005	000012	000000	000000	000000	000000	000000
012	1	000005	000012	000000	000000	000000	000000	000000

Page 1 of 1

Figure 2: The Performance-based Pricing Strategy table.

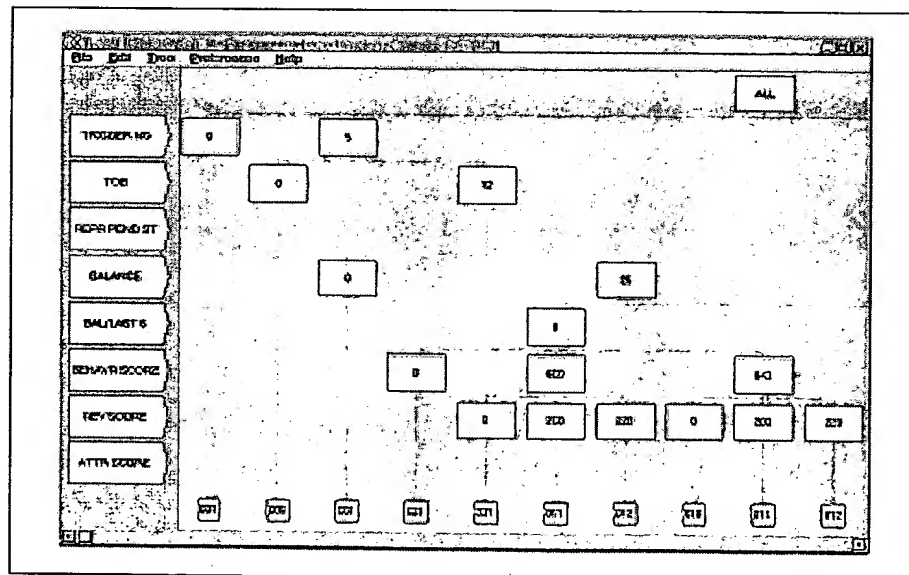


Figure 3: The Performance-based Pricing Strategy tree.

## Strategy Keys

The keys described in this section (see table 4) are used in the Performance-based Pricing decision area. Keys are determined during the design meetings with your Fair, Isaac representative. Therefore, the keys described in this section may differ from those used in your installation. Consult the *TRIAD Project Guide* for a description of the keys used in your implementation of Performance-based Pricing.

Because TRIAD offers flexible strategy keys, the number, order, and selection of keys may vary among strategies in a decision area. The maximum number of keys in a strategy table is fifteen. However, you need select only the keys necessary for each strategy. Strategy keys can have numeric, alphabetic or alphanumeric values. Numeric values can be either positive or negative.

Table 4: Frequently-Used Performance-based Pricing strategy keys.

Trigger Event	Identifies the first affirmative optional trigger test. If no optional triggers are used, this value will equal zero. For example, if you have three Required and four Optional triggers, this field contains the number of the first Optional trigger with an affirmative test.
Cycles Delinquent	Shows the delinquency level.
Customer Relationship Code	Identifies the types of relationships, for example, credit card or line-of-credit, the customer has with the institution.
Months Since Active	Presents the number of months since account was active.
Homeowner	Differentiates between home owners and renters.
Behavior Score	Shows the account's behavior score.
Credit Bureau Score	Shows the account's credit bureau score.

## Performance-based Pricing Scenarios

All ten Performance-based Pricing actions (see table 5 on page 254) are defined at the design meeting. Some actions are pre-programmed by Fair, Isaac. The others are mapped in a very general way, permitting you to change their use from campaign to campaign.

This section of the chapter examines some possible Performance-based Pricing actions. See the *TRIAD Project Guide* for the actions chosen for your installation.

Table 5: Typical Performance-based Pricing actions.

Allowable Movement Indicator	Signals the repricing action to be taken. C: indicates a pending repricing action should be canceled. D: indicates downward repricing, i.e., an interest rate decrease. N: indicates no change is needed. U: indicates upward repricing, i.e., an interest rate increase.												
Notification Days	Identifies the number of days ahead of a pricing change a cardholder must be notified.												
Letter ID	Identifies a particular letter from the letter library. Check the <i>TRIAD Project Guide</i> for specific validation rules for your installation.												
Interest Rate	Identifies the new interest rate to be applied to the account.												
Interest Rate Variance	Indicates a value added to or subtracted from the interest rate on the account.												
Statement Message ID	Identifies a message to be printed on the account holder's statement. See the <i>TRIAD Project Guide</i> for specific validation rules for your installation.												
Product Table ID	Assigns a number to identify a plan containing all the pricing characteristics of an account. Typically, this value is used instead of individual values for APR or Interest Rate Variance.												
Statement Insert	Identifies an optional statement insert. Leave it blank if statement inserts are not used in this scenario.												
Annual Fee	A value indicating whether an annual fee should be assessed.												
Balance Affected	The portion of the account's balance affected by the change in pricing. For example, the following values and meanings can be used: <table> <tr> <td>Value</td><td>Meaning</td></tr> <tr> <td>"G"</td><td>Apply new rate to GRANDFATHERED balance</td></tr> <tr> <td>"N"</td><td>Apply new rate to NEW balance</td></tr> <tr> <td>"C"</td><td>Apply new rate to CURRENT balance</td></tr> <tr> <td></td><td>Any combination of the above ("GN", "GC", or "NC")</td></tr> <tr> <td>"A"</td><td>Apply new rates to ALL balances</td></tr> </table>	Value	Meaning	"G"	Apply new rate to GRANDFATHERED balance	"N"	Apply new rate to NEW balance	"C"	Apply new rate to CURRENT balance		Any combination of the above ("GN", "GC", or "NC")	"A"	Apply new rates to ALL balances
Value	Meaning												
"G"	Apply new rate to GRANDFATHERED balance												
"N"	Apply new rate to NEW balance												
"C"	Apply new rate to CURRENT balance												
	Any combination of the above ("GN", "GC", or "NC")												
"A"	Apply new rates to ALL balances												

Table 5: Typical Performance-based Pricing actions. (continued)

Ratification Method	A value indicating the pricing change ratification method (statement, usage, etc.).
---------------------	---

All Performance-based Pricing strategies use scenarios from the Performance-based Pricing Scenario table (see figure 4 on page 255). The Scenario ID is the link between the Strategy and Scenario tables. The Performance-based Pricing Scenario table is delivered with a capacity for 999 scenarios. See your *TRIAD Project Guide* for the number selected for your installation.

Performance-based Pricing Scenario

Environment Name: TEST

Scenario ID: [Dropdown]

Description: No change to rate

Ratified Values

Action 1	Action 2	Action 3	Action 4	Action 5	Action 6	Action 7	Action 8	Action 9	Action 10
ES12	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA

Scenario List Close

Record 1 of 1

Figure 4: The Performance-based Pricing Scenario table.

## Performance-based Pricing Outcomes Reporting

Each time a Performance-based Pricing action is taken, a record is written to the Report Record file. At the end of the reporting period, all the information is tallied and summarized. Collectively, the outcomes reports are known as the Cycle Tally reports.

The Performance-based Pricing Outcomes reports show the number of accounts assigned to each action by Random Digit Group and SPID. Because the reports are summarized by digit group, you can easily compare Champion and Challenger strategies. There are six Performance-based Pricing Outcomes reports:

- Trigger Outcomes Report
- Outcomes by Digit Group
- Outcomes by Digit Group and Behavior Score
- Outcomes by Digit Group and Scenario ID
- Outcomes by Digit Group, Scenario ID, and Behavior Score
- Rate Transition Report by Digit Group

## Production Schedule

Cycle Tally reports are produced once a month, typically at month-end. If needed, they can also be produced on a daily or weekly basis. Under normal conditions, monthly reports are sufficient.

Reports are produced by Strategic Portfolio Identification (SPID) number. There is a report for each SPID, as well as one that totals all SPIDs. Each report title contains the first and last date for the included data. Within the body of the report, totals are given for transactors and revolvers with the digit group and for each trigger. For more information on specific criteria, see your *TRIAD Project Guide*.

## Trigger Outcomes Report

The Performance-based Pricing Trigger Outcomes report (see figure 5 on page 257) provides a list of all the accounts, segmented into digit groups, that passed into the Performance-based Pricing strategies. It lists the triggers, trigger values, and how many accounts met each trigger's criteria. The columns and rows are defined in table 6 on page 258.

TRIAD DEMO SYSTEM					TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE					PAGE NO : 9	
REPORT ID : TRDC6PPP-01-V5.0					REPORTING PERIOD - 01/02/1997 THRU 01/28/1997					RUN DATE : 02/07/1997	
PROCESSING DATE : 02/07/1997										RUN TIME : 17:29:45	
STRATEGIC PORTFOLIO ID: 12					PERFORMANCE-BASED PRICING TRIGGER OUTCOMES					NAME: Acquisition	
DIGIT GROUP	TOTAL ACCOUNTS	NUMBER EXCLUDED	FAILED TRIGGERS	PASSED TRIGGERS	STORY ID	LABELS	TRIGGER DATA TYPE	FROM	TO	NUMBER FAILED	NUMBER PASSED
00-49	0	0	0	0	801	01 ANNUAL FEE	O	0	24	0	(R)
	29	0	0	29		02 CYCLES DELQ	O	1	9	0	(T)
						03 MTS SMC DES TRM	O	1	24	0	(R)
						04 CURRENT BALANCE	O	0	4	0	(R)
						05 MTS SMC LST RPR	O	0	999	0	(T)
						06 USER DEFINED	O	0	999	0	(R)
						07 USER DEFINED	O	0	9999999	0	(T)
						08 USER DEFINED	O	0	9999999	20	(R)
						09 USER DEFINED	O	0	999	9	(R)
						10 USER DEFINED	O	0	9999999	0	(T)
						FAILED ALL OPTIONAL TRIGGERS				0	(R)
										0	(T)
50-99	0	0	0	0	802	01 ANNUAL FEE	R	0	24	0	(R)
	31	0	31	0		02 CYCLES DELQ	R	1	9	11	(T)
						03 MTS SMC DES TRM	R	1	24	0	(R)
						04 CURRENT BLANCE	R	0	4	0	(T)
						05 MTS SMC LST RPR	R	0	999	0	(R)
						06 USER DEFINED	R	0	999	0	(T)
						07 USER DEFINED	R	0	9999999	0	(R)
						08 USER DEFINED	R	0	9999999	0	(T)
						09 USER DEFINED	R	0	999	0	(R)
						10 USER DEFINED	R	0	9999999	0	(T)
						PASSED ALL REQUIRED TRIGGERS				0	(R)
										0	(T)

NOTES: R = REVOLVERS, T = TRANSACTORS

Figure 5: The Performance-based Pricing Trigger Outcomes report.

## Field Reference

The headings for Performance-based Pricing Trigger Outcomes report include the Reporting Period and the Strategic Portfolio ID and Name. The line item (T) is provided for transactors; (R), for revolvers. For an explanation of the difference between them, see the *TRIAD Project Guide*.

Table 6: Fields in Report: Performance-based Pricing Trigger Outcomes.

<b>Row headings:</b>	
Digit Group	Random digit group range.
Possible Outcomes:	Failed all optional triggers, Passed all required triggers, No triggers used, All Passed
Total	Total accounts tallied.
<b>Column headings:</b>	
Total Accounts	Total number of accounts reviewed in the digit group.
Number Excluded	Number of accounts excluded from the decision area for the indicated digit group.
Failed Triggers	Number of accounts that did not meet any of the trigger criteria for the indicated digit group.
Passed Triggers	Number of accounts that met the trigger criteria for the indicated digit group.
Strategy ID	Strategy Identification number.
Trigger Data	
Labels	Trigger number and name.
Type	Type of trigger: Optional, Required, or Not Used.
From	Lower-bound value of the trigger range. The value is inclusive.
To	Upper-bound value of the trigger range. The value is inclusive.
Number Failed	Number of accounts that failed the Required trigger criteria.
Number Passed	Number of accounts that passed the Optional trigger criteria.



## Outcomes by Digit Group

The Performance-based Pricing Outcomes Report by Digit Group (see figure 6) tallies the actions taken in each digit group, making it easy to compare Champion and Challenger strategies. The columns and rows are defined in table 7 on page 260.

TRIAD DEMO SYSTEM				TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE				PAGE NO : 7	
REPORT ID : TRDC6PFF-02-V5.0				REPORTING PERIOD - 01/02/1997 THRU 01/28/1997				RUN DATE : 02/07/1997	
PROCESSING DATE : 02/07/1997				PERFORMANCE-BASED PRICING OUTCOMES BY DIGIT GROUP				RUN TIME : 17:29:45	
STRATEGIC PORTFOLIO ID: 12				ACTION(S) RECEIVED				NAME: Acquisition	
DIGIT GROUP	TOTAL REVIEWED	NO CHANGE	VARIANCE	PCT ID	NOTIFY DAYS	STMT MSO	STMT INSERT	LETTER ID	
00-49	0	0	0	0	0	0	0	0	(R)
	29	0	29	0	29	29	29	29	(T)
50-99	0	0	0	0	0	0	0	0	(R)
	0	0	0	0	0	0	0	0	(T)
TOTAL	0	0	0	0	0	0	0	0	(R)
	29	0	29	0	29	29	29	29	(T)

NOTES: R = REVOLVERS, T = TRANSACTORS

Figure 6: The Performance-based Pricing Outcomes Report by Digit Group report.

*Note: Due to tailoring, the group of Actions Received that appears on your report may differ from those listed in the following table.*

## Field Reference

The headings for Performance-based Pricing Outcomes by Digit Group report include the Reporting Period and the Strategic Portfolio ID and Name. The reporting period spans the period from the first cycle in the file until the last. The line item (T) is provided for transactors; (R) is for revolvers. For an explanation of the difference between them, see the *TRIAD Project Guide*.

Table 7: Fields in Report: Performance-based Pricing Outcomes by Digit Group.

Row headings:	
Digit Group	Random digit group range.
Total	Total number of accounts tallied for each column.
Column headings:	
Total Reviewed	Total number of accounts reviewed in each digit group.
No Change	Number of accounts receiving an N in the Allowable Movement Indicator. The Allowable Movement Indicator has the following values: C: indicates a pending repricing action that should be canceled. D: indicates downward repricing, i.e., an interest rate decrease. N: indicates no change is needed. U: indicates upward repricing, i.e., an interest rate increase.
Action(s) Received	
Variance	The number of accounts assigned to a scenario specifying a variance.
Product Table ID	The number of accounts assigned to a scenario specifying a product code.
Notification Days	The number of accounts assigned to a scenario specifying notification days.
Statement Message	The number of accounts assigned to a scenario specifying a statement message.
Statement Insert	The number of accounts assigned to a scenario specifying a statement insert.
Letter ID	The number of accounts assigned to a scenario specifying a letter.



## Field Reference

The report headings for Performance-based Pricing Outcomes Report by Digit Group and Behavior Score contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The line item (T) is provided for transactors; (R) is for revolvers. For an explanation of the difference between them, see the *TRIAD Project Guide*.

Table 8: Fields in Report: Performance-based Pricing Outcomes Report by Digit Group and Behavior Score.

Row headings:	
Behavior Score	Behavior Score ranges.
Total	Total number of accounts tallied for each column.
Column headings:	
Total Reviewed	Total number of accounts reviewed in each digit group.
No Change	Number of accounts receiving an N in the Allowable Movement Indicator. The definition of No Change is specific to your installation. See your <i>TRIAD Project Guide</i> for details.
Action(s) Received	
User Indicator	Number of accounts receiving a User Indicator action.
Variance	The number of accounts assigned to a scenario specifying a variance.
Product Table ID	The number of accounts assigned to a scenario specifying a product code.
Notification Days	The number of accounts assigned to a scenario specifying notification days.
Statement Message	The number of accounts assigned to a scenario specifying a statement message.
Statement Insert	The number of accounts assigned to a scenario specifying a statement insert.
Letter ID	The number of accounts assigned to a scenario specifying a letter.

## Outcomes by Digit Group and Scenario

The Performance-based Pricing Outcomes by Digit Group and Scenario ID report (see figure 8) tallies the actions taken by each scenario and reports the total and cash balance for the accounts assigned to the scenario. The actions reported by digit group facilitate the comparison of Champion and Challenger strategies. The columns and rows are defined in table 9 on page 264.

TRIAD DEMO SYSTEM			TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE			PAGE NO : 2		
REPORT ID : TRDC6PPP-04-V5.0			REPORTING PERIOD - 01/02/1997 THRU 01/28/1997			RUN DATE : 02/07/1997		
PROCESSING DATE : 02/07/1997			PERFORMANCE-BASED PRICING OUTCOMES BY DIGIT GROUP AND SCENARIO			RUN TIME : 17:29:45		
STRATEGIC PORTFOLIO ID: 01						NAME: Regular		
DIGIT GROUP : 00-99			ACTION DESCRIPTIONS FROM SCENARIO					
SCH ID	VARIANCE	PCT ID	NOTIFY DAYS	STMT MSG	STMT INSERT	LETTER ID	TOTAL REVIEWED	CASH BALANCE (000)
003	-10.250	00	000	401	00001	235	0	0 (R)
							2820	80,010
							0	0 (R)
							2820	13,015 (T)
NOTES: R = REVOLVERS, T = TRANSACTORS								

Figure 8: The Performance-based Pricing Outcomes by Digit Group and Scenario report.

## Field Reference

The report headings for Performance-based Pricing Outcomes Digit Group and Scenario contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle in the file until the last. The line item (T) is provided for transactors; (R) is for revolvers. For an explanation of the difference between them, see the *TRIAD Project Guide*.

The fields in the report are listed below. Please note that all scenario actions are user-defined. The actions used at your installation may differ from those on the sample report.

Table 9: Fields in Report: Performance-based Pricing Outcomes by Digit Group and Scenario.

<b>Row headings:</b>	
Scenario ID	Identifies the Performance-based Pricing scenario.
<b>Column headings:</b>	
Action Descriptions from Scenario	
Variance	Identifier for accounts specifying a variance.
Product Table ID	Identifier for accounts specifying a product code.
Notification Days	Identifier for accounts specifying notification days.
Statement Message	Identifier for accounts specifying a statement message.
Statement Insert	Identifier for accounts specifying a statement insert.
Letter ID	Identifier for accounts specifying a letter.
Total Reviewed	The total number of accounts assigned to each scenario.
No Change	The number of accounts receiving an N in the Allowable Movement Indicator. The definition of No Change is specific to your installation. See your <i>TRIAD Project Guide</i> for details.
Total Balance	The sum of the total balance for all accounts assigned to the indicated scenario. It includes both changed and unchanged accounts and both cash and merchandise balances.
Cash Balance	The sum of the cash balance for all accounts assigned to the indicated scenario.

## Outcomes by Digit Group, Scenario and Behavior Score

The Performance-based Pricing Outcomes by Digit Group, Scenario and Behavior Score report (see figure 9) groups each account by Digit Group, lists the account by Scenario ID, and tallies the number of accounts by behavior score for each Scenario. The actions reported by digit group facilitate the comparison of Champion and Challenger strategies. The columns and rows are defined in table 10 on page 266.

TRIAD DEMO SYSTEM		TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE								PAGE NO :	2
REPORT ID : TRDC6PPP-05-V5.0		REPORTING PERIOD - 01/02/1997 THRU 01/28/1997								RUN DATE : 02/07/1997	
PROCESSING DATE : 02/07/1997		PERFORMANCE-BASED PRICING OUTCOMES BY DIGIT GROUP, SCENARIO AND BEHAVIOR SCORE								RUN TIME : 17:29:45	
STRATEGIC PORTFOLIO ID: 01										NAME: Regular	
DIGIT GROUP : 00-99											
SCEN	ID	NOT SCORED	001-008	009-649	650-674	675-699	700-724	725-749	750-774	775-999	NUMBER CHANGED
003		0	0	0	0	0	0	0	0	0	0 (R)
		0	0	20	0	0	0	0	0	0	20 (T)
TOTAL		0	0	0	0	0	0	0	0	0	0 (R)
		0	0	20	0	0	0	0	0	0	20 (T)

NOTES: R = REVOLVERS, T = TRANSACTORS

Figure 9: The Performance-based Pricing Outcomes by Digit Group, Scenario and Behavior Score report.

## Field Reference

The report headings for Performance-based Pricing Outcomes by Digit Group, Scenario, and Behavior Score contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle in the file until the last. The line item (T) is provided for transactors; (R), for revolvers. For an explanation of the difference between them, see the *TRIAD Project Guide*. The fields in the report are listed below.

Table 10: Fields in Report: Performance-based Pricing Outcomes by Digit Group, Scenario, and Behavior Score.

Row headings:	
Scenario ID	Identifies the Performance-based Pricing scenario.
Total	Total number of accounts in each score range.
Column headings:	
Behavior Score	
Not Scored	The number of accounts not fully scored assigned to this scenario.
000 - 999	Number of accounts in the specified behavior score range assigned to this scenario.
Number Changed/ No Change	The number of accounts receiving an N in the Allowable Movement Indicator or your installation specific definition. No Change accounts are reported on a separate page of the report.



## Outcomes Rate Transition by Digit Group

The Performance-based Pricing Outcomes Rate Transition by Digit Group report (see figure 10) groups accounts by Digit Group and then tracks the number of accounts migrating from one pricing scheme to another, displaying the corresponding balances for revolvers and transactors. The distinction between revolvers and transactors are specified by the customer. For more information on specific criteria, see your *TRIAD Project Guide*. The columns and rows in the figure below are defined in table 11 on page 268.

TRIAD DEMO SYSTEM			TRIAD - STRATEGIC ACCOUNT MANAGEMENT SOFTWARE			PAGE NO : 5		
REPORT ID : TRDC6PPE-06-V5.0			REPORTING PERIOD - 01/01/1997 THRU 01/18/1997			RUN DATE : 02/08/1997		
PROCESSING DATE : 02/08/1997			PERFORMANCE-BASED PRICING OUTCOMES RATE TRANSITION BY DIGIT GROUP			RUN TIME : 18:00:24		
STRATEGIC PORTFOLIO ID: 01						NAME: Regular		
DIGIT GROUP : 00-99								
PRICING SCHEME CHANGE	FROM	TO	NUMBER	BALANCE	CASH BALANCE	NUMBER	BALANCE	CASH BALANCE
SCH0000000 > SCH0000001			1	1,000	500	1	1,000	500
> SCH0000002			1	1,000	500	0	0	0
> SCH0000003			1	1,000	500	0	0	0
SCH0010000 > SCH0000001			0	0	0	1	1,000	500
> SCH0000002			0	0	0	1	1,000	500
SCH0030000 > SCH0000001			0	0	0	3	3,000	1,500
			3	3,000	1,500	6	6,000	3,000

Figure 10: The Performance-based Pricing Outcomes Rate Transition by Digit Group report.

## Field Reference

The report headings for Performance-based Pricing Outcomes Rate Transition by Digit Group contain the Reporting Period, Strategic Portfolio ID and Name, and Digit Group. The reporting period spans the period from the first cycle in the file until the last. The fields in the report are listed below.

Table 11: Fields in Report: Performance-based Pricing Outcomes Rate Transition by Digit Group.

<b>Row headings:</b>	
Pricing Scheme Change From	Identifies the old pricing scheme for the account.
Pricing Scheme Change To	Identifies the new pricing scheme for the account.
<b>Column headings:</b>	
<b>Revolvers</b>	
Number	Identifies the number of accounts migrating between the indicated "From" and "To" pricing schemes. It includes both changed and unchanged accounts.
Balance	Indicates the total balance of accounts migrating between the indicated pricing schemes. It includes both changed and unchanged accounts and both cash and merchandise balances. The amount is expressed in thousands.
Cash Balance	Indicates the total cash balance of accounts migrating between the indicated pricing schemes. The amount is expressed in thousands.
<b>Transactors</b>	
Number	Identifies the number of accounts between the "From" and "To" pricing schemes. It includes both changed and unchanged accounts.
Balance	Indicates the total balance of accounts migrating between the indicated pricing schemes. It includes both changed and unchanged accounts and both cash and merchandise balances. The amount is expressed in thousands.
Cash Balance	Indicates the total cash balance of accounts migrating between the indicated pricing schemes. The amount is expressed in thousands.

## Performance-based Pricing Estimator Reports

For each report version chosen on the Estimator Control dialog box, you can choose up to four report sets to print (Total Amount, Average Amount, % of Column, and % of Row).

All Performance-based Pricing Estimator reports use the same reporting matrix, which is shown in table 12.

Table 12: Fields in Reports: Performance-based Pricing Estimator.

Row headings:	
Total Pass Trig	All accounts that passed all required triggers and at least one optional trigger.
Total Fail Trig	All accounts that failed at least one required trigger.
Excluded	Accounts not evaluated because they met the exclusion criteria presented in the <i>TRIAD Project Guide</i> . This is a hierarchical tally. If an account is both excluded and strategy 999, it will tally here.
Stgy 999/Notexcl	Accounts not evaluated owing to assignment to strategy 999 and not counted under exclusion. Applies to the SPID Control table and to the Strategy Assignment table.
Total	All accounts tallied in this group or total across all groups. Evaluated + Excluded + Stgy 999 (where shown) = Total
Column Headings:	
Trigger Label	This label is specified in the <i>TRIAD Project Guide</i> .
Trigger #	The number of the trigger associated with the label, also specified in the <i>TRIAD Project Guide</i> .
Pass	
# Accts	Number of accounts that pass each optional trigger.
Fail/Total	
# Accts	Number of accounts that fail a required trigger.
# Scored	Subset of the accounts tallied above, the number that had a behavior score in the min to max range as specified in the Table Maintenance System. This is usually newly scored accounts and accounts with a retained score. Not included are those excluded from scoring or with a payment projection score.
Odds	Odds associated with # Scored. The odds are based on score, not actual performance. They are the ratio of good accounts to bad accounts. For example, odds of 60/1 mean that out of 61 accounts, 60 will be good and 1 will be bad. Odds reflect populations. You can expect to see higher odds in a premium portfolio than in a general one. For more information on odds, see the chapter on <i>Behavior Scoring</i> in this manual.



# Glossary

---

## **Allowable exposure**

The allowable exposure for an account is the amount above or below the credit limit for which a transaction will be authorized. Allowable exposure is calculated using Cushion and Percent Fit tests.

## **Attributes**

Ranges of values into which a characteristic is divided. Each attribute has a weight associated with it. The summation of the weights produces the unaligned or raw score. Attributes are used to label a column in a scorecard.

For example, the characteristic "Average Balance Last Six Months" may be divided into four attributes: less than \$250, \$250 to \$499, \$500 to \$3499, and \$3500 or more.

## **Available Credit**

The amount of credit that remains when the account's current balance and outstanding authorizations are subtracted from the credit line. Synonymous with open to buy.

## **Bad Accounts**

Accounts that were unsatisfactory during the performance period. Accounts that are bankrupt, charged-off, or have reached an advanced state of delinquency are often said to be bad.

## **Balance-at-Risk**

This field is the product of the current balance multiplied by the probability of the account going bad, based on the behavior score. Balance-at-Risk is used as a key in many decision areas, as well as to order collection queues.

## Behavior Score

A tool for assessing risk of an account. It is derived from calculations that quantify current and past account behavior. The term, behavior score, encompasses several types of scorecards offered by Fair, Isaac. They can all be built at the account or customer level.

Standard Behavior (Risk) Score	Predicts the probability of an account remaining good; i.e., not reaching an advanced state of delinquency
Payment Projection	Predicts the probability of recovery or the possible percentage to be recovered from accounts in advanced stages of delinquency
Attrition	Predicts the probability that an account will become inactive
Revenue	Predicts the amount of revenue an account is likely to produce
Fraud	Predicts the probability that current transaction is fraudulent
Cross-sell Response	Predicts the probability of success in a cross-sell campaign

## Behavior Scorecard

A table in which points are assigned according to characteristic attributes, creating the account's behavior score.

## Branch

The path an account takes in the Strategy Tree diagram to reach its treatment group. A branch represents one row of a Strategy table.

## Breakpoints

An Overlimit Collections trigger. When a breakpoint is crossed, it triggers a review in the Overlimit Collections Strategy table. Crossing a breakpoint has a very precise definition. To cross a breakpoint, the account's balance before posting must be less than the designated breakpoint; its balance after posting must be equal to or greater than the breakpoint.

## Cash Cushion

A special extension of the cash line. It is available only in installations that have separate cash lines. Other names for Cash Cushion are "shadow limit", "pad", or "pencil limit". Cash Cushion works with the Cash Cushion Type:

- If the Cash Cushion Type is "U" the Cash Cushion is a percentage.
- If the Cash Cushion Type is "L" or "D", the Cash Cushion is an amount.

### **Cash Cushion Type**

Defines how the Cash Cushion test will be applied. It has four values. See the Cushion Type entry for a list of the tests.

### **Centering**

To base the Challenger strategy on the Champion strategy; you center the Challenger on the Champion.

### **Challenger**

A new strategy to be tested against the Champion.

### **Champion**

The existing strategy currently applied to accounts.

### **Characteristic**

A measurement of account behavior. Essentially, it poses a question about an account. For example, the Time-on-Books characteristic asks, "How long has this account been open?". Each characteristic is broken into definite ranges of values called attributes. Characteristics are used to label a row in a scorecard.

### **Clean Account**

An account that has not been delinquent for an indicated number of months (usually, twelve months).

### **Cleverness Indices**

A term describing the Average Balance Performance Ratio found on the third page of the Strategy Performance reports. The lower the ratio the better the strategies are performing.

### **Coarse Classing**

The process in which individual attributes are grouped for statistical validity.

### **Credit Line**

The Credit Line or Credit Limit of an account is the amount of credit extended to the accountholder. A credit line may be increased temporarily through a Cushion or for an extended period through a credit line increase. Credit lines may also be decreased and reduced to zero.

## Cushion

A special, temporary extension of the credit line. Cushion amounts are calculated on a per transaction basis. Other names for Cushion are "shadow limit", "pad", or "pencil limit". Special variations of cushion are available for cash, holiday, and holiday cash transactions. Cushion works in conjunction with the Cushion Type. See Cushion Type.

## Cushion Type

Defines how the Cushion test will be applied. It has four values: Utilization, Line, Designated Amount, and Zero. The four cushion types apply to Regular, Cash, Holiday, and Holiday Cash Cushion calculations.

Utilization (U)	When Cushion Type = U, the Cushion is a percentage of the existing credit line. To allow exposure 10% above the credit line, enter U in Cushion Type and 110 in Cushion. You can also use this field to assign a value under the existing credit limit; for example, to allow exposure only up to 80% of the credit line, enter U in Cushion Type and 80 in the Cushion field.
Line (L)	When Cushion Type = L, the Cushion is a fixed amount that acts as a temporary credit line. To temporarily increase a credit line to \$5,000, enter L in Cushion Type and 5000 in Cushion.
Designated Amount (D)	When Cushion Type = D, the Cushion is designated amount over the existing credit line. To allow exposure \$250 over the credit line, enter D in Cushion Type and 250 in Cushion.
Zero (Z)	When Cushion Type = Z, the credit line is set to zero for purposes of the transactions. Although this action does not alter the actual credit line, it does block purchases. To temporarily set a credit line to zero, enter Z in Cushion Type and 0 in Cushion.

## Decision Area

A management area for treating accounts. Several decision areas are available in TRIAD:

- Authorizations
- Marketing Communications
- Credit Line Management
- Delinquent Collections
- Overlimit Collections
- Reissue
- Performance-based Pricing

## Decision Key

See Strategy key.



**Digit Group**

See Random Digit Group.

**Dirty Account**

An account that has been delinquent during an indicated period, often twelve months.

**Dynamic Reclassification**

Assigning a delinquent account to a different scenario during daily processing. Dynamic reclassification lets you re-evaluate a delinquent account when the delinquency status or balance changes.

**Estimator Report**

The Estimator Program produces reports that estimate the number of accounts that are defined by each row of the control tables and the risk quality of these accounts.

**Exclusion**

A reason for removing accounts from a particular aspect of TRIAD processing, such as behavior scoring or a decision area. For example, bankruptcy is often an exclusion from many decision areas, including Delinquent Collections and Credit Line.

An account may be excluded from one area, but included in another. An inactive account may not have a new score calculated, but still be included in the Communications area, especially if there is a re-activation campaign planned.

**Exclusion Score**

Special behavior scores values that indicate that an account has been excluded from behavior scoring. Bankruptcy or inactivity are frequent exclusion reasons, each with a user-assigned exclusion score. Exclusion scores can be isolated in a strategy key in order to treat accounts that are not scored.

**Flexible Strategy Keys**

A TRIAD feature which allows you to select the strategy keys appropriate for each strategy. Also see Strategy Keys.

**Good Accounts**

Accounts that were satisfactory throughout the performance period.

### **Holiday Cash Cushion**

A special extension of the cash line for use during designated holiday periods. The holidays are defined in the Linkage parameter, PP30-HOLIDAY-IND. Setting the field to '1' defines a holiday. Setting it zero defines regular processing. See Cushion for more information.

### **Holiday Cash Cushion Type**

Defines how the Holiday Cash Cushion test will be applied. It has four values. See Cushion Type for a list of the tests.

### **Holiday Cushion**

A special extension of the credit line for use during designated holiday periods. The holidays are defined in the Linkage parameter, PP30-HOLIDAY-IND. Setting the field to '1' defines a holiday. Setting it to '0' defines regular processing. See Cushion for more information.

### **Holiday Cushion Type**

Defines how the Holiday Cushion test will be applied. See Cushion Type for a list of the tests.

### **Holiday Percent Fit**

Holiday Percent Fit works like the regular Percent Fit: a percentage of the transaction that must fit in the current available credit if the transaction is to be approved. The Holiday parameter lets you designate a holiday period and use a different value.

### **Indeterminate Accounts**

Accounts that did not qualify as good or bad after the performance period.

### **Leaf**

The scenario ID in a strategy tree.

### **Odds**

Indicate the probability that an account will or will not reach an unsatisfactory condition over the next specified number of months.

### **Odds-to-Score**

See Points to Double the Odds.

**Open-to-Buy**

See Available Credit.

**Overlimit Breakpoint**

See Breakpoints.

**Pad**

See Cushion.

**PDO**

See Points to Double the Odds.

**Pencil Limit**

See Cushion.

**Percent Fit**

Provides a percentage of the transaction that must fit within the current available credit for the transaction to be approved.

For example, if the Percent Fit is 80%, and the open-to-buy is \$100, 80% of the transaction amount must be equal to or less than \$100. Percent Fit is a test applied to authorization transactions that do not fit within the Cushion. If a transaction does not fit within the Cushion, but fits within the Percent Fit, it will be approved. Percent Fit has separate cash and credit values.

**Performance Period**

During scorecard development, the performance period is the length of time between the observation date and the performance date. Often for standard behavior scorecards, this period is six months.

After the behavior scorecards have been implemented, this term refers to the amount of time over which the performance of the scorecards is examined, typically the same interval that was used in development. The performance period is also called the performance interval or performance window.

**Points to Double the Odds (PDO)**

An odds-to-score relationship determined during the initial scorecard design meetings. The number indicates the increment in score at which the odds will double. For example, a 20-point PDO means that the odds will double every 20 points. If the odds are 60 to 1 at a score of 600, they will be 120 to 1 at a score of 620.

### **Pseudo-Champion**

The first strategies you build in TRIAD. They mimic your existing strategies.

### **Random Digit Group**

A series of contiguous random digits. Each range represents a percentage of the accounts in the portfolio. For example, the range 00 - 09 contains approximately 10% of the accounts in the portfolio. The range 50 to 99 contains approximately 50% of the accounts in the portfolio.

Random digit groups support Champion/Challenger testing.

### **Random Digit**

A number between 00 and 99 assigned sequentially to all accounts when the file is initialized for TRIAD. New accounts are assigned a random digit during new account processing. TRIAD uses the random digits to divide the portfolio into statistically significant groups, called Random Digit Groups, for Champion and Challenger testing.

### **Raw Score**

A behavior score that has not been aligned or weighted. On a scorecard, it is the sum of all scores on the card.

### **Retained Score**

A behavior score for an account whose score was retained from a prior month and not recalculated.

### **Rollover**

The movement of an account to a higher level of delinquency.

### **Roll Rate**

The progression of delinquency from one level to the next.

### **Scenario**

Contains the actions assigned to accounts. Actions can be as simple as taking no action or as complex as setting a block code, sending a letter, setting a collection indicator, and including a statement insert. The scenario tables are updated using the TRIAD Table Maintenance System.

**Scenario ID**

A three-digit number that identifies a set of actions. The scenario ID is not specific to a decision area. The same ID can be used in more than one area.

**Scenario Table**

The repository of action sets for a decision area. Each decision area has one scenario table, whose scenarios are shared by all the strategy tables in that decision area.

**Scorecard**

A table with account characteristics and their attributes, and the score associated with each attribute. A scorecard is used to derive a behavior score (or other type of score) for an account.

**ScoreNet®**

A Fair, Isaac service that provides information from the major North American credit bureaus.

**Shadow Limit**

See Cushion.

**SPID**

See Strategic Portfolio Identification Number.

**SPID 99**

A group of accounts excluded from TRIAD treatment. For example, you may assign accounts whose receivables you do not own to SPID 99.

**Strategic Portfolio**

A group of accounts managed collectively. For example in the bankcard environment, Classic and Gold accounts are often put into separate Strategic Portfolios because the terms differ.

**Strategic Portfolio Identification Number (SPID)**

A two-digit number that identifies a group of accounts that are managed collectively.

**Strategy**

A plan by which accounts are divided into groups that receive different actions. Decision keys within the strategy are used to sort the accounts for different treatments.

### **Strategy ID**

Connects a decision area strategy to a particular Random Digit group.

### **Strategy ID 999**

A special strategy ID that signals TRIAD to bypass decision area processing for that account. Strategy 999 accounts are processed by the calling program, not TRIAD.

### **Strategy Keys (Decision Keys)**

Define the conditions that cause an account to be assigned to a scenario. One of the three essential building blocks (along with scenarios and parameters/triggers) from which strategies are made.

### **Strategy Table**

A table that defines various account profiles and assigns a set of treatments to each defined group.

### **Strategy Table Row**

A line of several decision keys. Each row says, in effect, if A and B and C and D, then use this scenario.

### **Strategy Tree**

A graphical representation of a strategy, created using the TreeView feature of the TRIAD Table Maintenance System.

### **Table Maintenance System**

The PC-based system through which TRIAD tables are viewed and updated. The Audit and Estimator Reports are also requested through this system.

### **Test Digits**

See Random Digit Groups and Random Digits.

### **Transaction Type**

Refers to the user-defined Authorization transactions. This field is often a strategy key in the Authorization decision area. The Transaction Type also plays a role in creating the Authorization Report Record file.

### Transformation Multiplier

An alignment factor used to keep scores consistent across all scorecards and portfolios.

For example, if a score of 600 in Portfolio A has odds of 60/1, that score in Portfolio B should also have odds of 60/1. Two transformation factors are used to bring scores back into alignment. They are: Transformation Multiplier and Transformation Weight.

Scorecards that are developed concurrently with TRIAD by Fair, Isaac are delivered with a Transformation Multiplier of 1.0.

### Transformation Weight

An alignment factor used to keep scores consistent across all scorecards and portfolios.

For example, if a score of 600 in Portfolio A has odds of 60/1, that score in Portfolio B should also have odds of 60/1. The Transformation Weight is an additive factor used after the Transformation Multiplier has been applied. The weight may be positive or negative.

Scorecards that are developed concurrently with TRIAD by Fair, Isaac are delivered with a Transformation Weight of 0.0.

### Treatment Area

A standalone piece of TRIAD, such as a decision area, scoring, or individual reports.

### TreeView™

A component of the TRIAD Table Maintenance System that lets you design strategy trees graphically on your personal computer. You can add, change, delete, or move branches as needed. You can copy a branch to another place in the same tree or a different tree. You can print copies of the strategy trees you develop. See the *TRIAD Table Maintenance Guide* for more information.

### Weight

A number associated with an attribute on a scorecard.

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# Index

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## A

- Aligned score 34
- Allowable Movement
  - Cash line setting 122
- Allowed Movement
  - Credit Line settings 122
- Attribute
  - defined 34
- Attributes
  - coarse classing 42
- Audit program 14, 21
  - definition 80
  - in production 80
  - reports generated by 80
- Audit report 80
- Authorizations
  - Configuring options 194
  - Exclusions 195
  - Log file 193, 203
  - Overview 193
  - Parameters
    - Do Authorization Processing 194
- Processing
  - timing 193
  - Transaction Type 201
  - TRIAD treatable accounts 205
- Reports
  - Estimator 210–213
  - Outcomes 206–210
  - Summary 203–206
- Scenarios 201
- Strategy keys 200–201
- Triggers 195
  - Cash settings 195
  - Credit settings 195
  - Cushion 195, 197
  - Cushion type 195, 197

- disabling Cushion test 197
- Holiday settings 195
- Percent Fit 195, 198
- Scenario 195
- test sequence 198

## B

- Bads 35
  - defined 39
- Behavior score 7
  - clean population 41
  - combining populations 41
  - definition 33
  - dirty population 41
  - exclusion codes 37
  - exclusions 37
  - hierarchy 53
  - performance reports 53
  - population definitions 41
  - reporting 44
  - retention 37
  - tally reports 44–52
  - technical review 53
  - test records 44
- Branch 61
- Breakpoint 177

## C

- Cash Cushion 197
- Cash Cushion type 197
- Cash Line
  - Allowed Movement 122, 124
  - breakpoints 179
  - changing 124
  - Maximum Cash Line 124
  - Percent Cash Line 124
- Cash Percent Fit 198

- Challenger
  - assigning digit groups 90
  - centering on Champion 79
  - defined 10
  - designing 67
  - implementation timing 79
  - sample strategy keys 72
  - sample trigger values 71
- Champion
  - assigning digit groups 90
  - defined 10
- Champion/Challenger testing 8, 10, 88
  - reports 93
- Characteristic
  - defined 34
- Characteristics
  - defined 42
  - in implementation 42
- Cleverness indices 103
- Coarse classing 42
- Credit Bureau Attribute Cutoff values 26
- Credit Line Management
  - Configuring options 110
  - Decreasing non-delinq acct 124
  - Exclusions 112
  - Overview 109
  - Parameters
    - Credit Line Rounding Method 120
  - Reports
    - Estimator 137–141
    - Outcomes 125–136
  - Rounding Method 120
  - Scenarios 118–124
    - Allowed Movement 122
    - Fixed Cash Line 124
    - Letter ID 123
    - Overlimit Fee waiver 123
    - Percent Cash Line 124
    - Statement message 123
  - Strategy keys 117
  - Strategy table 115
  - Triggers 113
- Crossing an Overlimit breakpoint 178
- Cushion
  - defined 197
  - disabling test 197
  - interaction with Percent Fit Test 198

- test 198
- Cushion type
  - defined 197
  - values chart 197
- Cycle processing 16

## D

- Delinquent Collections
  - Configuring options 145, 176
  - Dynamic Reclassification 153
    - Downward 154
    - Examples 155–156
    - Timing 153
    - Upward 154
  - Exclusions 145
  - Overview 143
  - Parameters
    - Downward Dyn Reclass Ind 145, 147
    - NSF Check Scenario ID 145
    - Upward Dynamic Reclass Ind 145, 147
  - Reports
    - Estimator 169–174
    - Outcomes 157–164
    - Performance 164–168
  - Scenarios 150
    - Fields in 151–152
  - Triggers 146
    - Scenario 146
- Delinquent Collections scenarios
  - warning about 69
- Divergence 34
- Downward Dynamic Reclass Ind 145, 147
- Dynamic reclassification
  - Bypassing 153
  - downward 145, 154
  - NSF scenario 153
  - severity comparison 156
  - suppressing 147
  - triggers 147, 153
  - upward 145, 154

## E

- Estimator 14
  - defined 81
  - parameters 83

- Reports 21, 81
  - % of Column 82
  - % of Row 82
  - Average Amount 82
  - described 84
  - Sampling factors 26
  - Total Amount 82
- Results
  - Analyzing 84
  - role of the Report Record file 83
- Evaluating Strategies 80
- Exclusions 13

## F

- Fair, Isaac
  - list of services 24
- Fixed Cash Line 124
- Formatted Report Records
  - Pass/Return Test 21
  - Printing 21
  - Score Test 21
  - Strategy Key Test 21

## G

- Goods 35
  - defined 39

## H

- Holiday
  - Cash Cushion 197
  - Cash Cushion type 197
  - Cash Percent Fit 198
  - Cushion 197
  - Cushion type 197
  - Percent Fit 198

## I

- Indeterminates 35
  - defined 39
- InformPlus 42

## L

- Level 61

## M

- Marketing Communications
  - Configuring options 232
  - Exclusions 232
  - Overview 231
  - Reports
    - Estimator 246
    - Outcomes 239–245
  - Scenarios 238
  - Strategy keys 236
  - Strategy table 235
  - Triggers 232–234
    - Highest Value parameter 233
    - interaction with strategy keys 234
    - Lowest Value parameter 233
    - Required/Optional parameter 233

## N

- Node 61
- NSF Check Scenario ID 145

## O

- Observation date 34
- Odds 7
  - defined 34
- Odds-to-Score relationship 34
- Odds-to-score relationship 40, 53
- Overlimit Breakpoint 177
- Overlimit Collections
  - Exclusions 176
  - Overview 175
  - Reports
    - Estimator 191–192
    - Outcomes 186–190
  - Scenarios 183–185
    - no severity checks 183
  - Strategy keys 182
  - Strategy table 180
  - Triggers 177–179
    - Amount Breakpoint 178
    - Breakpoint 177
    - Crossing a breakpoint 178
    - Percent Utilization 178
- Overlimit Fee Waiver
  - Counter 123

## P

- Pad 197
- PDO 40
- Pencil limit 197
- Percent Cash Line 124
- Percent Fit
  - defined 198
  - disabling 198
  - interaction with Cushion Test 198
  - test 198
- Performance date 34
- Performance definition 35
- Performance period 35, 53
- Performance window 35, 39
- Performance-based Pricing
  - Configuring options 248
  - Exclusions 248
  - Overview 247
  - Reports
    - Estimator 269
    - Outcomes 256–268
  - Scenarios 254–255
  - Strategy keys 253
  - Strategy table 251
  - Triggers 249–251
    - Highest Value parameter 249
    - interaction with strategy keys 251
    - Lowest Value parameter 249
    - Required/Optional parameter 249
- Points to Double the Odds (PDO) 34, 40
- Population splits
  - clean/dirty 41
  - combining populations 41
  - current delinquency 41
  - new/old split 41
- Post on Billing Night 145
- Posting
  - Daily 17
- Production environment 14
- Profitability calculation fields 26
- Pseudo-Champion strategy 67, 70

## R

- Random Digit groups 10
  - bypassing TRIAD treatment 91
  - Champion and Challenger strategies 90

- defined 88
  - increasing size of Challenger 90
  - random digits 88
  - size requirement 89
  - size requirements 90
- Random digits 88
- Raw score 35
- Reissue
  - Configuring options 216
  - Exclusions 216
  - Overview 215
  - Reports
    - Estimator 228–229
    - Outcomes 222–228
  - Scenarios 220–222
  - Strategy keys 219
  - Strategy table 218
  - Triggers 217
  - Reissue Review Index 217
- Reissue Review Index
  - defined 217
- Report Record file 8, 17, 44, 83
  - and Strategy Perf reports 94
- Reporting period 94
- Reports
  - Outcomes 18
  - Performance 20
  - Strategy Performance 93
    - Fields in 97, 101, 105
  - Headings 94
- Re-randomization 10

## S

- Scenario 14
  - Actions 67
  - definition 67
  - ID 61
  - Sample 67
  - Sample actions by decision area 68, 69
- Scorecard
  - Attrition score 33
  - definition 35
  - development process 36
  - Fraud score 33
  - Payment projection score 33
  - Performance
    - Reports 53–59

- Performance definition 39
  - Performance exclusions 40
  - Response score 33
  - Revenue score 33
  - Risk score 33
  - Shadow limit 197
  - SPID
    - 99 26
    - Assignment keys 27
      - Ranges 28
    - Assignment table 9
    - Control table 30
      - Auths Sample Pct/TType 31
      - CB Attribute Cutoff 30
      - Profit fields 31
    - Definition 9
    - importance in reporting 44, 94
    - importance in TRIAD 26
    - optimal number 25
  - SPID Assignment table
    - Overview 26
  - Strategic portfolios 25
  - Strategy
    - Challenger 67
    - designing 67
    - elements of 63
    - Evaluation of 80
    - Pseudo-Champion 67
    - sample 70, 71
  - Strategy 999 10
  - Strategy assignment
    - process overview 87
    - role of digit groups 88
    - role of SPID 88
    - role of Strategy ID 88
  - Strategy Assignment table
    - Random Digit groups 88
    - Strategy 999 10
  - Strategy development
    - and the behavior score 79
    - and workload 79
    - implementation timing 79
    - importance of Audit program 80
    - importance of Estimators 81
    - tips 79
  - Strategy ID 10
    - 999 91
    - role in strategies 69
  - Strategy keys 13, 66
    - definition 61
    - library of 13
  - Strategy tables 14
  - Strategy tree
    - branch 61
    - keys 61
    - level 61
    - node 61
- ## T
- Technical Review 53
  - Test digits 10
  - Test groups 10
  - Test records 44
  - Transaction type 194
  - TRIAD
    - bypassing treatment 91
    - documentation 9
    - Processing
      - Audit program 21
      - Control tables 20
      - Cycle 16
      - Daily 17
      - Estimator 21
      - Estimator reports 21
      - Formatted Report Record report 17
      - On-Demand 20
      - Outcomes reports 17
      - Schedule 15
      - Transaction 17
    - Software
      - Table Maintenance System 8
    - Treatable accounts 205, 209
  - TRIAD Software 8
  - Triggers 13
    - based on scenarios 65
    - definition 64
    - filters used as 66
    - primary 64
    - timing 65
- ## U
- Upward Dynamic Reclassification Indicator
    - 145, 147

## W

Weight 35